

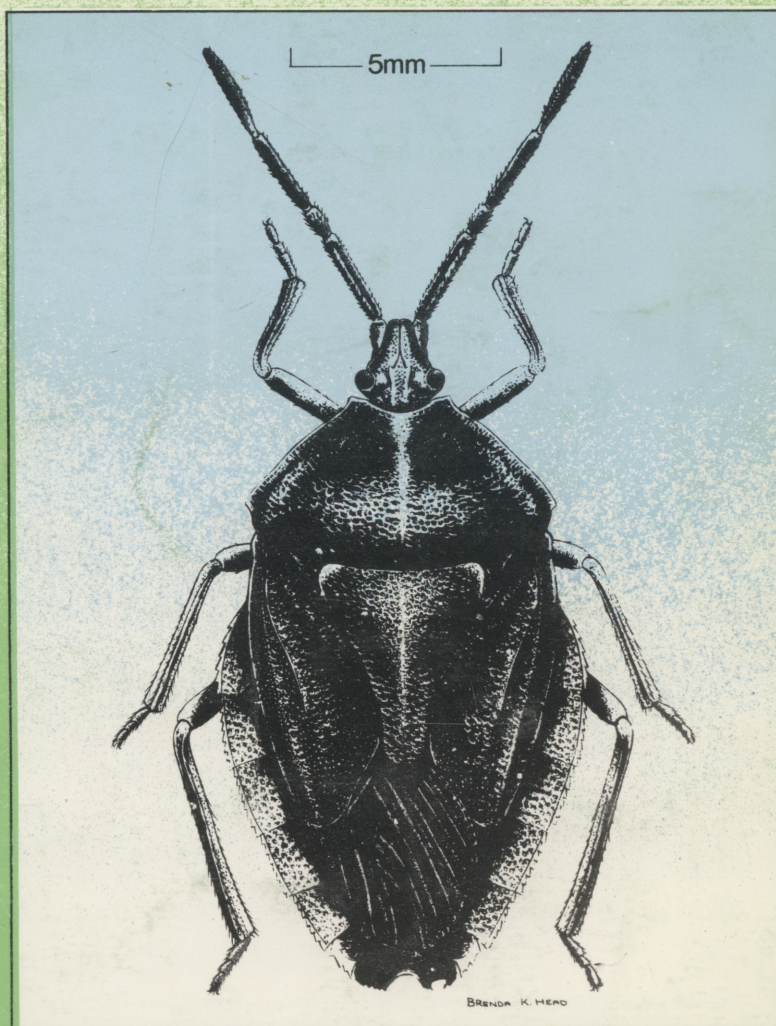
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COVER ILLUSTRATION modified from a drawing by Brenda K. Head that appeared in "Plant-feeding and other bugs (Hemiptera) of South Australia, Heteroptera - Part 1" (Gross, Gordon, F., 1975).

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SOIL AND CULTIVATION IN THE PAPUA NEW GUINEA HIGHLANDS: II. A COMPARISON OF INDIGENOUS AND SCIENTIFIC PERSPECTIVES.

Dr Paul Sillitoe¹

ABSTRACT

This is the second in a two part series of papers investigating the assertions of some Southern Highlanders that they do not inspect soil before clearing sites for cultivation. This paper assesses the status of their disclaimers through the analysis of the results of a survey of soil sites. A classification of soil resources is built up using multivariate techniques, by first assessing horizon variations, then constructing profile sequences, and finally combining these with clusters of site characteristics. A comparison of the resulting soil resource classification with indigenous assessments of, and agricultural use of soils reveals no apparent relationship, although there are some interesting soil-cultivation trends. The analysis fails to go beyond what local people assert about inspection of soils before cultivation, for there are apparently no observable patterns of properties by which they might assess agricultural potential.

Key words. Papua New Guinea, Southern Highlands Province, soil/site description, soil classification, multivariate analysis.

INTRODUCTION

The Wola of the Southern Highlands Province of Papua New Guinea say that inspection of soil does not figure in their selection of sites for cultivation, as related in Part I of this series of papers. In an attempt to assess the status of their disclaimers about soil appraisal, and to evaluate generally the standing of local soil knowledge, the results of a survey of soil sites conducted in the west of their region are presented and discussed here.

The sites surveyed occurred, by and large, on the local territories of two neighbouring *semonda* clan communities, situated adjacent to the Waga and Augu rivers, in Nipa District. It also included parts of the territories of other neighbouring *semonda* clan communities, particularly those with locations that had good examples of certain soil classes, such as sandy and gley soils, alluvial soils on extensive water-borne deposits (at lower altitudes in the vicinity of Lake Kutubu) and clayey soils on volcanic parent materials (Rutherford and Haantjens 1965; Bleeker 1983; Wood 1984; Radcliffe 1986). The total number of sites described was eighty-five.

The sites were not selected randomly, but with two aims in mind, related to the gardeners' unexpected disclaimers about soil appraisal. Firstly, to describe

and classify the soils of the area according to a framework sympathetic to local perceptions and judgements, and secondly, to accommodate and appraise the affects of local land use and agriculture on the soils (Clarke and Street 1967; Wood 1979). In relation to the first aim, an effort was made to include in the survey sample representative examples of the different soil types identified in the area. And in relation to the second aim, sites were selected according to their vegetational cover and slope, in an effort to obtain representative coverage of different land uses, both past and present, and so allow for their impact on the soils.

Table 1 lists the classes of site distinguished according to land use, vegetational cover and slope, and the number of sites described in each class. While trying to obtain a representative sample of the soils in the survey region, by structuring the selection of sites according to the above guidelines to ensure the necessary distribution, sites were otherwise selected in a casual manner depending to some extent on local people's ideas of where would be a good place to look at a particular soil that met certain of the above criteria. Another factor that influenced the choice of sites was that a wide geographical spread of sites from around the region was more desirable than bunching in one locality, where this was commensurate with the above objectives. A final factor was that landowners did not object to me digging profile pits on sites (a consideration that applied to gardens only).

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Table 1. Distribution of sites in soil survey sample according to land use, vegetation cover and slope.

LAND USE	VEGETATION	SLOPE		
		Steep	Shallow	Flat
Uncultivated land	Primary forest	6	6	2
	Wetland vegetation			
	Secondary forest	5	7	1
	Cane grassland	5	7	2
Disturbed land	Grasses & herbs	2	6	
	(long term gardens) (short term gardens)	5	3	2
	Primary forest			
	Secondary forest	2	3	
Currently cultivated land	Cane grassland	2	2	
	Primary forest	3	2	
	Secondary forest	3	1	
	Cane grassland	2	2	
	Wetland vegetation			2
	Bare ground (abandoned house site)			2
	Established long term gardens cleared from:			
	Recently cultivated gardens cleared from:			

The sites and soils were described according to the Soil Survey of England and Wales procedure, as detailed in the *Soil Survey Field Handbook* (Hodgson 1976). The nominal depth of the profiles described was set at 50 cm, as the depth most relevant to an assessment of soil-related factors affecting agricultural land use, but this was often exceeded. The local description of the soil and assessment of its agricultural potential was supplied by those who assisted me, plus any other individuals who happened to be on site during the survey. They were asked to comment on the agricultural potential of the soil and to assess its status on a six-point scale (as very good, good, middling, poor, very poor, or waterlogged)¹.

DATA ANALYSIS

The data were subsequently programmed into an Amdahl 5860 and analysed multivariately using the SPSS-X computing package, employing ordination by principal components analysis, with cross-tabulation, factor analysis and cluster analysis (Cuanelo and Webster 1970; Goel and Gaikawad 1974; Webster and Burrough 1974; Webster 1977; Oliver and Webster 1987). The analysis distinguished between different classes of soils according to all the survey data, suggesting correlations that might help assess both the effects of soil status on local land use and of subsequent agricultural practices on the soils. And it compared these findings with indigenous soil judgements and perceptions, to assess the validity of assertions that the soil does not significantly influence and guide cultivation decisions.

The 'unearthing' of correlations between land use and soils, and local assessments of the cultivation potential of different soils, demands the classification of the soils described by profile and site. Firstly, different horizon types are defined, after assessing intra-horizon variations in soil properties. Secondly, different profiles are distinguished, as comprising different horizon sequences. And thirdly, these soil profiles are correlated with the site data to generate a soil resource classification. The strategy overall produces a classification of entire soils, as comprising sequences of defined horizons occurring in specified site locations. Finally, this soil resource classification is compared with land use and local assessments of soil-worth in an attempt to trace connections between cultivation practices and soil status.

HORIZON VARIATION

Any pattern to the variation in properties within horizons was assessed initially in a series of cross-tabulations of those pairs of soil properties that might reasonably be expected to show some correlation in their variation. While some evidenced a degree of correlation, the results were not conclusive, indicating that the horizons do not vary internally in any straightforward manner with certain properties varying regularly in relation to one another. The majority of properties showed a random distribution and no correlation. This lack of success was not surprising because if such an obvious variation in properties was present within horizons local people might be expected to comment upon it. We have to anticipate a more complex classification than one where only a few key parameters control class ascription. Principal components analysis was used to begin generating such a classification and assess what properties were responsible for the larger part of the variation within horizons (Rayner 1966; Webster 1977). The first three factors account for the greater part of the variation that occurs within each horizon.

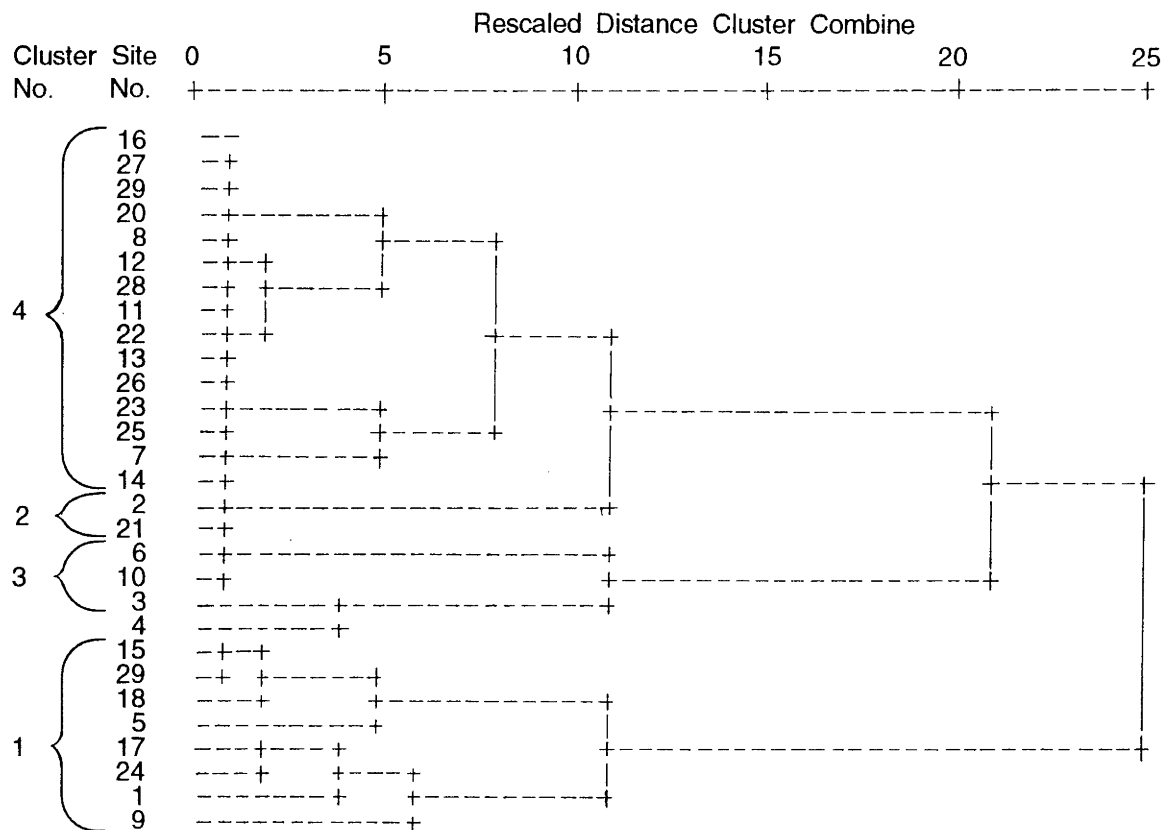
The HORIZON VARIATION is as follows:

HORIZON 1: The first three principal components account for 50% of the variation (twenty-four factors were required to account for 100%). The first principal component represents stoniness, not merely the presence of stones but their abundance, size, shape and lithology, together with depth of the horizon, plus associated depth of rooting and abundance of roots. The second principal component represents colour (hue and value), which can possibly be associated tenuously with organic matter status, as they might be expected to vary in relation to one another. The third principal component represents texture. In summary, we can characterise the variation that occurs in horizon 1 as due principally to stoniness, thickness of horizon and depth of rooting, and differences in colour and texture.

HORIZON 2: The first three principal components account for 39% of the variation (thirty-four factors were required to account for 100%). The first principal component largely represents mottles, their abundance, size, contrast and boundaries. Of secondary importance are the related properties of texture and consistency (stickiness, plasticity and strength), to-

Table 2. Cluster dendrogram for horizon 1

Dendrogram using Average Linkage (Between Groups)



gether with the structural properties of ped packing, shape and size. The second principal component represents stoniness (abundance, size and shape of stones). The third principal component relates to colour (value and chroma), together with the thickness of the horizon and the related property of rooting depth. In summary, we can characterise the variation that occurs in horizon 2 as due principally to differences in mottling, together with structure, consistence and texture.

HORIZON 3: The first three principal components account for 53% of the variation (sixteen factors were required to account for 100%). The first principal component represents the related properties of texture and consistence (stickiness and strength), and organic matter status and colour (value and chroma), and to a considerably lesser extent stoniness (abundance, size and lithology of stones) and porosity (size and percentage of macropores). The second principal component represents

mottles, their abundance, size, contrast and boundaries. And the third principal component relates to horizon thickness, and to a lesser extent to bulk density and acidity. In summary, we can characterise the variation that occurs in horizon 3 as due principally to differences in texture, consistence, organic matter status and colour, plus mottling and horizon thickness.

HORIZON 4: The first three principal components account for 37% of the variation (thirty-two factors were required to account for 100%). The first principal component represents mottles, their abundance, size, contrast and boundaries, and to a lesser extent stoniness (abundance, size and lithology of stones - the latter scoring high under factor 2). The second principal component relates to texture primarily. The third principal component relates to depth, abundance and type of roots, and to a lesser extent to colour (chroma and value - the former scoring high under factor 2), and porosity.

Table 3. The mean/predominating properties for horizon 1 clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Thickness	6 cm (1.8)	4 cm (2.1)	2 cm (0.5)	7 cm (1.8)
Boundary (1/2)	merging smooth	smooth merging	smooth sharp	smooth
Colour : hue	2,1 (50%) 5.6YR (0.4)	2,1 (50%) 7.5R (0)	2,1 (50%) 10.6R (1.2)	1,1 (33%) 1.2YR (3.3)
: value	2.9 (0.1)	2.0 (0.3)	2.3 (0.3)	2.0 (0)
: chroma	2.1 (0.2)	2.5 (0.5)	2.5 (0.3)	2.1 (0.2)
Organic matter	H 3 (0.4)	H 3 (0)	H 3 (0.5)	H 3 (0)
Texture	sandy silt loam 3 (0.4)	silt loam 4 (0)	silt loam 4 (0)	silt loam 4 (0.3)
Stones : abundance	<1% 1 (0.4)	1-5% 2 (0.7)	zero 1 (0)	1-5% 2 (0.5)
: size	very small 1 (0.7)	small 3 (2.8)	- 0 (0)	very small & small 2 (0.8)
: shape	rounded/sub-rounded 2 (1.6)	rounded 1 (2.6)	- 0 (0)	rounded 1 (0.8)
: lithology	chert 1 (100%)	chert 1 (100%)	- 0 (0)	volcanic 5 (50%)
Soil water	slightly moist 2 (0.4)	very moist 3 (0)	very moist 3 (0.5)	slightly moist 2 (0.3)
Consistence : stickiness	non-sticky 1 (0.4)	non-sticky 1 (0)	non-sticky 1 (0)	non-sticky 1 (0)
: plasticity	slight 2 (0.4)	non-plastic 1 (0)	slight 2 (0.5)	slight 2 (0.3)
: strength	very friable 2 (0.4)	very friable 2 (0)	very friable 2 (0.5)	very friable 2 (0)
Structure : ped shape	granular 5 (88%)	granular 5 (100%)	granular 5 (75%)	granular 5 (53%)
: ped size	medium 3 (0.7)	fine-medium 2 (0)	fine 1 (0.5)	fine-medium 3 (0.3)
: ped grade	moderate 2 (0.4)	moderate 2 (0.7)	moderate 2 (0.5)	weak 1 (0.3)
: packing density	low 1 (0)	low 1 (0)	low 1 (0)	low 1 (0)
Voids : pore size	very fine, fine, medium 5 (0.7)	medium 7 (1.4)	medium 7 (1.5)	medium 6 (0.5)
: pore %	3.13 (0.7)	5.0 (0)	5.0 (0)	4.20 (0.3)
Roots : abundance	many 3 (0.4)	abundant 4 (0.7)	abundant 4 (0)	abundant 4 (0.3)
: size	very fine, fine, medium (0.7)	very fine, fine medium, coarse (0)	medium (1.0)	very fine, fine, medium, coarse (0.3)
: depth	6 cm (1.8)	4 cm (2.1)	2 cm (0.5)	7 cm (1.8)
: type	fibrous	woody, fibrous, freshy	woody, fibrous, freshy	woody, fibrous
pH	3 (50%) 5.10 (0.2)	7 (50%) 5.05 (0.15)	7 (70%) not measured	2 (67%) 4.89 (0.08)

ity (size and percentage of macropores). In summary, we can characterise the variation that occurs in horizon 4 as due principally to differences in mottling and stoniness, texture, rooting, colour and porosity.

HORIZON CLASSIFICATION

Cluster analysis was used to create horizon classes (Rayner 1966; Webster 1977). The results of this agglomerate method, which creates a hierarchy from a similarity matrix by the nearest neighbour strategy, can be shown as a dendrogram or tree-diagram, on which the vertical lines represent distance in character space, and the horizontal lines correspond to the distance at which fusion occurs. The similarity measures relate to the above principal components, which give the properties that most differentiate between groups. The following discussion identifies four clusters per horizon, giving mean values and standard errors for the soil properties defining each cluster.²

The HORIZON CLASSES are as follows:

HORIZON 1 (Tables 2 and 3): The dendrogram indicates the presence of three major groupings, the larger of which can be divided at a considerably lesser distance into two groups, to give the four clusters required. The number of cases in these clusters is variable (at 2, 4, 8 and 15). They are differentiated largely by thickness, colour, stoniness and rooting, as follows:

Cluster 1: Thick (6 cm), dark reddish brown, virtually stoneless horizon with many fibrous roots throughout.

Cluster 2: Thin to thick (av. 4 cm), very dark reddish brown, very slightly stony horizon (small rounded chert stones) with abundant woody, fibrous and fleshy roots throughout.

Cluster 3: Thin (2 cm), very dark reddish brown, stoneless horizon with abundant woody fibrous and fleshy roots throughout.

Cluster 4: Thick (7 cm), very dark reddish brown, very slightly stony horizon (very small and small rounded volcanic stones) with abundant woody and fibrous roots throughout.

There is not a great deal of variation within horizon 1 on this analysis (even between the two main groupings of cluster 1 and clusters 2, 3 and 4) and the lumping of all such horizons into a single class called *waip* by the local people is understandable.

HORIZON 2 (Tables 4 and 5): The dendrogram indicates the presence of two major groupings, the larger of which can be divided at a considerably lesser distance into three groups, to give four clusters. The number of cases in these clusters is again variable (at 2, 20, 30 and 31). They are differentiated largely by thickness, colour, mottling, texture, consistence, structure and porosity (although the standard errors indicate considerable overlap between clusters in some of these properties - e.g. colour) as follows:

Cluster 1: Thick (21 cm), brownish black, scarcely mottled silt loam; slightly sticky, moderately plastic and friable; blocky and granular structured, medium packed acidic horizon of middling porosity.

Cluster 2: Average thickness (14 cm), dark brown scarcely mottled silt loam; slightly sticky and plastic and very friable; granular structured loosely packed acidic horizon of high porosity.

Cluster 3: Thick (17 cm), brown, faintly mottled silty clay loam; slightly sticky, moderately plastic and friable; granular and angular blocky structured medium packed acidic horizon of low porosity.

Cluster 4: Variable (av. 8 cm), greyish brown, unmottled silty clay loam; moderately sticky and plastic, and very friable; granular or angular blocky structured medium packed alkaline horizon of low porosity.

The differences between these horizon 2 clusters is again not large, as the standard errors demonstrate, and the lumping of all such horizons by the local people into a single category called *suw pombray* is reasonable (which they may qualify as necessary according to stoniness (*pombray araytol*), wetness (*pa pombray*) and sandiness (*muw pombray*)). The principal difference between the two main groupings (cluster 2 and clusters 1, 3, 4) is structural: a loosely packed soil of low density, poor coherence and highly porous crumb structure on

Table 4. Cluster dendrogram for horizon 2. (Dendrogram using Average Linkage (Between Groups))

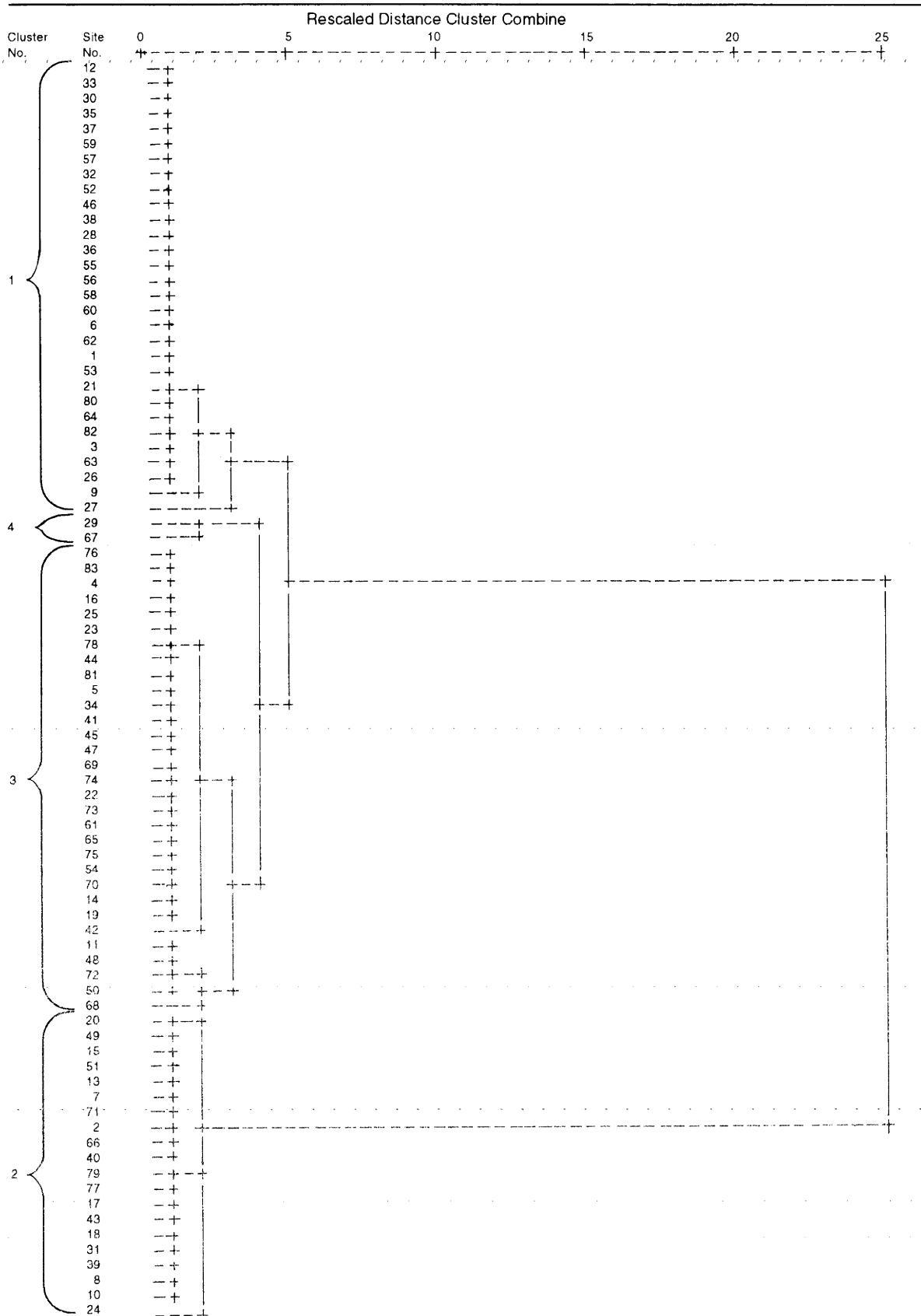


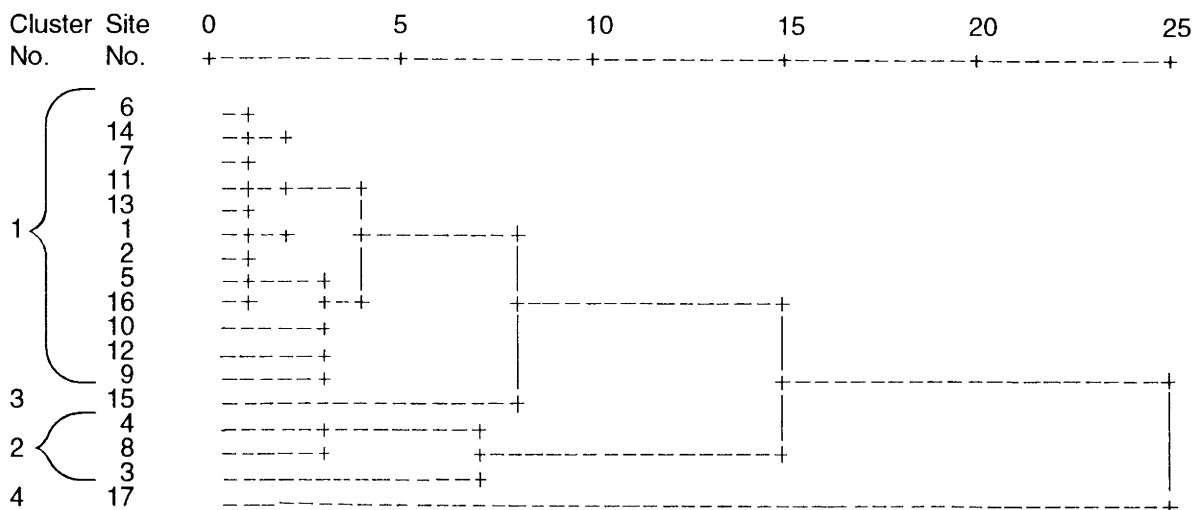
Table 5. The mean/predominating properties for horizon 2 clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Thickness	20.5 cm (2.8)	13.7 cm (3.0)	17.3 cm (1.9)	8 cm (5.0)
Boundary : (2/3;2/4)	merging smooth 2, 1 (60%)	merging smooth 2, 1 (45%)	merging smooth 2, 1 (55%)	merging smooth 2, 1 (50%)
Colour : hue	7.1 YR (0.3)	6-9 YR (0.3)	7.5YR (0.3)	6.3 YR (1.3)
: value	2.9 (0.1)	3.2 (0.2)	3.7 (0.2)	3.5 (0.5)
: chroma	2.4 (0.2)	2.5 (0.2)	2.8 (0.2)	2.0 (0.9)
Mottles : abundance	very few 0 (0.2)	very few 0 (0.2)	very few 0 (0.2)	none 0 (0)
: size	extremely fine 1 (0.4)	- 0 (0.5)	extremely fine 1 (0.4)	- 0 (0)
: contrast	- 0 (0.2)	- 0 (0.2)	fanint 1 (0.2)	- 0 (0)
: boundaries	- 0 (0.2)	- 0 (0)	- 0 (0.2)	- 0 (0)
Organic matter	Intimate 2 (0)	Intimate 2 (0)	Intimate 2 (0)	Intimate 2 (0)
Texture	silt loam 4 (0.2)	silt loam 4 (0.5)	silty clay loam 5 (0.4)	silty clay loam 5 (0)
Stones : abundance	1-5% 2 (0.2)	1-5% 2 (0.2)	1-5% 2 (0.2)	1-5% 2 (0.7)
: size	small 3 (0.6)	small 3 (0.7)	very small, small, medium 4 (0.7)	very small 1 (0.7)
: shape	subrounded & subangular 4 (0.4)	rounded & subrounded 2 (0.4)	subrounded & subangular 3.5 (0.3)	subrounded 3 (2.1)
: lithology	chert 1 (81%)	chert 1 (60%)	chert 1 (62%)	volcanic 5 (100%)
Soil water	slightly moist 2 (0)	slightly moist 2 (0.2)	very moist 3 (0.2)	slightly moist 2 (0)
Consistence : stickiness	slight 2 (0)	slight 2 (0.2)	slight 2 (0)	moderate 3 (0.7)
: plasticity	moderate 3 (0.2)	slight 2 (0.2)	moderate 3 (0.2)	moderate 3 (0.7)
: strength	friable 3 (0.2)	very friable 2 (0.2)	friable 3 (0.2)	very friable 2 (0)
Structure : ped shape	angular blocky & granular 3 (67%)	granular 5 (50%)	angular blocky & granular 3 (61%)	angular blocky or granular 1, 5 (100%)
: ped size	fine to medium 2 (0.2)	fine to medium 2 (0.2)	fine to medium 2 (0.4)	fine, medium, coarse 4 (0)
: ped grade	moderate 2 (0.2)	moderate 2 (0.2)	moderate 2 (0)	moderate 2 (0)
: packing density	medium 2 (0)	low 1 (0)	medium 2 (0)	medium 2 (0.7)
: bulk density	1.05 g cm ⁻³ (0.02)	0.96 g cm ⁻³ (0.04)	1.13 g cm ⁻³ (0.03)	1.15 g cm ⁻³ (0)
Voids : pore size	fine & medium 5 (0.4)	fine & medium 5 (0.5)	fine 3 (0.2)	fine & medium 5 (0.7)
: pore %	2.0% (0)	5.0% (0)	0.5% (0.04)	0.5% (0)
Roots : abundance	many 3 (0.2)	many 3 (0.2)	many 3 (0.2)	many 3 (0)
: size	very fine, fine, medium 4 (0.4)	very fine, fine, medium 4 (0.5)	medium 5 (0.4)	very fine, fine, medium 4 (0.2)
: depth	21 cm (2.9)	14 cm (2.9)	21 cm (2.2)	9 cm (5.7)
: type	woody & fibrous 2 (40%)	fibrous 3 (40%)	woody & fibrous 2 (45%)	woody & fibrous 2 (0)
CaCO ₃	<0.5% 0 (0.2)	<0.5% 0 (0)	<0.5% 0 (0)	1-5% 2 (2.1)
pH	4.99 (0.05)	4.85 (.04)	4.84 (.04)	6.15 (.035)
Pedogenic factors	not evident 0 (0)	not evident 0 (0)	not evident 0 (0)	not evident 0 (0)

Table 6. Cluster dendrogram for horizon 3.

(Dendrogram using Average Linkage (Between Groups)

Rescaled Distance Cluster Combine



the one hand, and more packed soil of higher density and coherence, and less porous more aggregated blocky structure on the other.

HORIZON 3 (Tables 6 and 7): The dendrogram indicates the existence of two anomalous sites, the others falling into two clusters, to give four. The number of cases in these clusters is consequently very variable (at 1, 1, 3 and 12), and their distribution is markedly skewed with 71% of the sample falling into one cluster. They are differentiated largely by thickness, colour, mottles, texture, stoniness, soil water, consistence, structure and porosity, and roots, as follows:

Cluster 1: Average thickness (23 cm), bright/yellowish brown, mottled, very slightly stony (small subrounded chert), mineral, sandy clay loam; slightly moist, moderately sticky, very plastic and firm; fine through coarse angular blocky or angular blocky and granular structured horizon of low porosity and few roots.

Cluster 2: Thin (6 cm), brown, unmottled, slightly stony (very small to medium angular chert), humose sandy clay loam; very moist, moderately sticky and plastic, and friable; fine and medium granular and/or angular blocky structured horizon of low porosity and roots common.

Cluster 3: Average thickness (28 cm), dark reddish grey, unmottled, stoneless, humose silty clay loam; wet, slightly sticky, moderately plastic and very friable; fine through very coarse angular blocky structured horizon of low porosity and many roots.

Cluster 4: Thick (41 cm), dull brown, unmottled, stoneless, humose sandy loam; slightly moist and sticky, moderately plastic and very friable; fine and medium granular and angular blocky structured horizon of middling porosity and few roots.

The differences between sub-types of horizon 3 are more marked than for the previous two horizons, although they may be more apparent than real given the skewed distribution. If we discount the markedly anomalous site, we can distinguish two major groupings (clusters 1, 3 and cluster 2), the principal differences between which relate to colour, stoniness, structure and rooting: on the one hand a more red-brown, nearly stoneless horizon with larger more aggregated peds and deep to fine roots, and on the other a more yellow-brown slightly stonier horizon with smaller less aggregated peds and shallower to very fine roots. This dual division parallels the identification of two principal types of transition horizon between top-soil and sub-soil by the local people (when they identify any at all). They distinguish between and name these horizons ac-

Table 7. The mean/predominating properties for horizon 3 clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster
Thickness	23.3 cm (3.7)	6 cm (2.6)	28 cm (0)	41 cm (0)
Boundary	merging smooth 2, 1 (76%)	sharp irregular 1, 3 (67%)	merging smooth 2, 1 (100%)	-
Colour : hue	8.7YR (0.4)	9.2 YR (0.8)	2.5 YR (0)	7.5YR (0)
: value	4.9 (0.2)	4.0 (1.2)	3.0 (0)	4.5 (0)
: chroma	5.5 (0.5)	3.7 (1.2)	1.0 (0)	4.0 (0)
Mottles : abundance	few 1 (0.3)	none 0 (0)	none 0 (0)	none 0 (0)
: size	very fine 2 (0.9)	- 0 (0)	- 0 (0)	- 0 (0)
: contrast	faint 1 (0)	- 0 (0)	- 0 (0)	- 0 (0)
: boundaries	sharp 1 (0.3)	- 0 (0)	- 0 (0)	- 0 (0)
Organic matter	not evident 1 (0.3)	intimate 2 (0.6)	intimate 2 (0)	intimate 2 (0)
Texture	sandy clay loam 7 (0.9)	sandy clay loam 7 (1.7)	silty clay loam 5 (0)	sandy loam 2 (0)
Stones : abundance	1-5% 2 (0.3)	6-15% 3 (1.2)	zero 1 (0)	zero 1 (0)
: size	small 3 (1.2)	v.small, small, medium 4 (1.7)	- 0 (0)	- 0 (0)
: shape	sub-rounded & subangular 3.5 (0.6)	angular 7 (0)	- 0 (0)	- 0 (0)
: lithology	chert 1 (63%)	chert 1 (100%)	- 0 (0)	- 0 (0)
Soil water	slightly moist 2 (0)	very moist 3 (0.6)	wet 4 (0)	slightly moist 2 (0)
Consistence : stickiness	moderate 3 (0.3)	moderate 3 (0.6)	slight 2 (0)	slight 2 (0)
: plasticity	very plastic 4 (0.3)	moderate 3 (0.6)	moderate 3 (0)	moderate 3 (0)
: strength	firm 4 (0)	friable 3 (0.6)	very friable 2 (0)	very friable 2 (0)
Structure : ped shape	angular blocky + granular 1, 3 (100%)	angular blocky &/or granular 1, 3, 5 (100%)	angular blocky 1 (100%)	angular blocky & granular 3 (100%)
: ped size	fine, medium, coarse 4 (0.7)	fine & medium 2 (0.9)	fine, medium, coarse, very coarse 7 (0)	fine & medium 2 (0)
: ped grade	moderate 2 (0)	moderate 2 (0.6)	moderate 2 (0)	moderate 2 (0)
: packing density	high 3 (0.3)	medium 2 (0.6)	medium 2 (0)	medium 2 (0)
: bulk density	1.22 gcm' (0.04)	not measured	1.10 gcm' (0)	1.20 gcm' (0)
Voids : pore size	fine 3 (0.9)	very fine & fine 2 (1.2)	v.fine, fine, medium 4 (0)	v.fine, fine, medium 4 (0)
: pore %	0.25% (0.06)	0.5% (0.2)	0.5% (0)	2.0% (0)
Roots : abundance	few 1 (0)	common 2 (0.6)	many 3 (0)	few 1 (0)
: size	v.fine, fine 2 (0.3)	very fine 1 (0.6)	v.fine, fine 2 (0)	v.fine, fine, medium 6 (0)
: depth	35 cm (4.0)	27 cm (5.2)	66 cm (0)	46 cm (0)
: type	fibrous 3 (58%)	fibrous 3 (100%)	woody & fibrous 2 (100%)	fibrous & fleshy 4 (100%)
pH	4.85 (0.04)	4.67 (0.07)	4.80 (0)	4.90 (0)
Pedogenic factors	not evident 0 (0.3)	not evident 0 (0.6)	not evident 0 (0)	not evident 0 (0)

Table 8. Cluster dendrogram for horizon 4.

Dendrogram using Average Linkage (Between Groups)

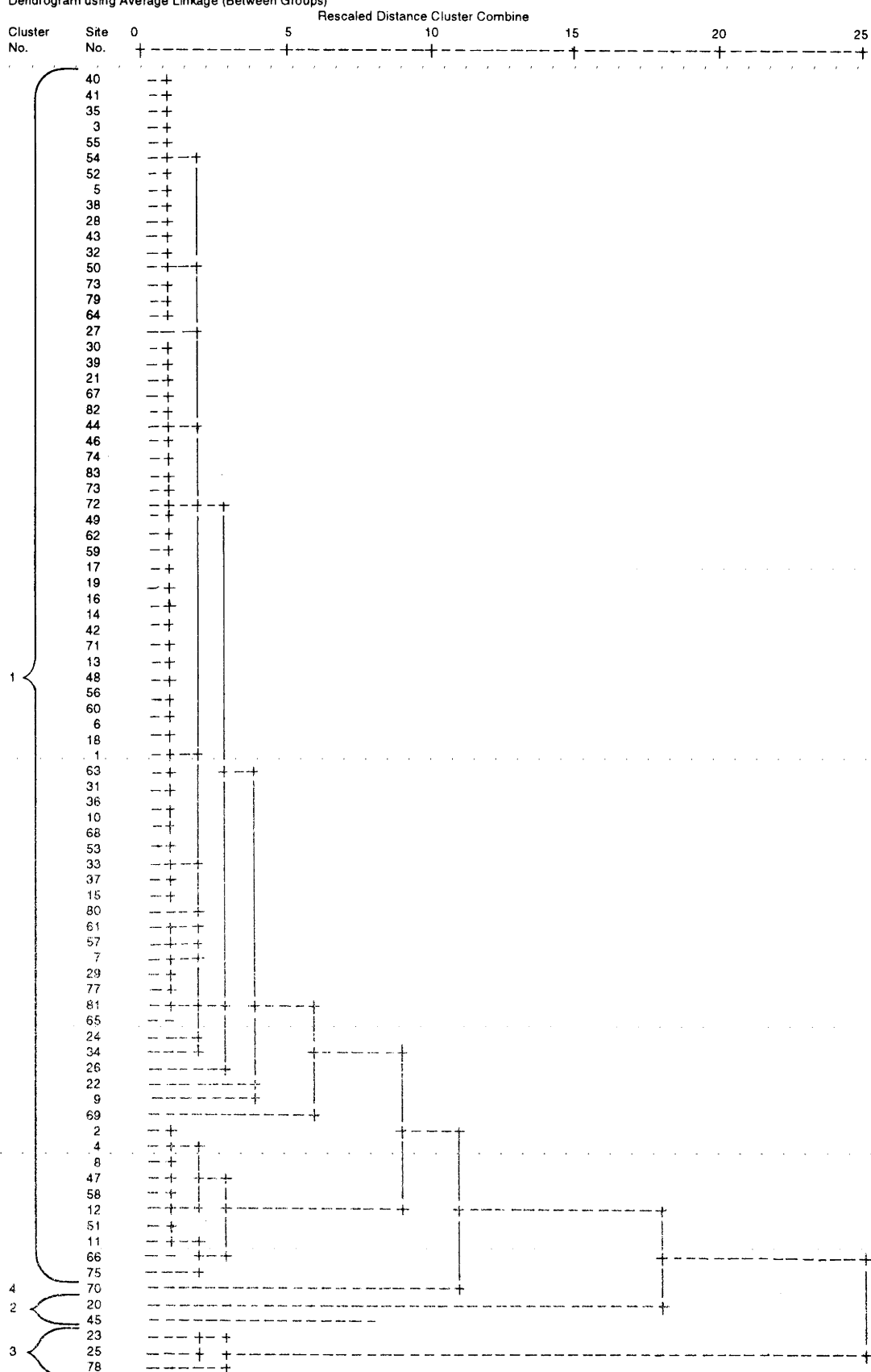


Table 9. The mean/predominating properties for horizon 4 clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Thickness	> 20 cm (0)	> 20 cm (0)	> 20 cm (0)	> 20 cm (0)
Colour : hue	8.3 YR (0.2)	7.5 YR (0)	1.7 YR (1.7)	7.5 YR (0)
: value	5.8 (0.1)	4.5 (0.5)	5.3 (0.3)	7.0 (0)
: chroma	6.9 (0.2)	4.5 (1.5)	5.3 (0)	1.0 (0)
Mottles : abundance	few 1 (0.1)	few 1 (0.7)	few 1 (0.6)	very many 4 (0)
: size	v.fine, fine 3 (0.5)	v.fine, fine, medium 5 (5.0)	fine 4 (2.9)	medium, coarse 9 (0)
: contrast	faint 1 (0.2)	faint/distinct 2 (1.4)	distinct 3 (1.2)	prominent 4 (0)
: boundaries	sharp 1 (0.10)	sharp 1 (0.7)	sharp 1 (0.6)	diffuse 3 (0)
Organic matter	not evident 1 (0)	intimate 2 (0.7)	not evident 1 (0)	not evident 1 (0)
Texture	silty clay 9 (0.10)	sandy clay 8 (0.7)	silty clay 9 (0.6)	sandy clay 8 (0)
Stones : abundance	6-15% 3 (0.2)	16-35% 4 (2.8)	< 1% 1 (0.6)	1-5% 2 (0)
: size	v.small, small, medium 4 (0.5)	small & medium 5 (4.2)	v.small & small 2 (2.3)	v.small, small, medium 4 (0)
: shape	subrounded & subangular 3.5 (0.2)	rounded & subrounded 1.5 (1.3)	rounded 1 (0.4)	subrounded & subangular 4 (0)
: lithology	chert 1 (75%)	volcanic 5 (100%)	volcanic 5 (100%)	volcanic 5 (100%)
Soil water	slightly moist 2 (0.1)	slightly moist 2 (0)	wet 4 (0)	very moist 3 (0)
Consistence : stickiness	moderate 3 (0.1)	very sticky 4 (0.7)	very sticky 4 (0)	very sticky 4 (0)
: plasticity	very plastic 4 (0)	very plastic 4 (0.7)	very plastic 4 (0)	very plastic 4 (0)
: strength	firm 4 (0)	firm 4 (0)	friable 3 (0.6)	firm 4 (0)
Structure : ped shape	angular blocky 1 (71%)	angular blocky & granular 3 (100%)	angular blocky 1 (100%)	angular blocky 1 (100%)
: ped size	fine, medium & coarse 4 (0.2)	medium & coarse 5 (1.4)	medium & coarse 5 (2.3)	fine, medium, coarse 4 (0)
: ped grade	moderate 2 (0)	moderate 2 (0)	moderate 2 (0.6)	moderate 2 (0)
: packing density	high 3 (0)	medium 2 (0)	high 3 (0)	high 3 (0)
: bulk density	1.32 gcm ³ (0.02)	1.30 gcm ³ (0)	1.47 gcm ³ (0.2)	1.30 gcm ³ (0)
Voids : pore size	v.fine, fine 2 (0.2)	medium 6 (1.4)	very fine 1 (0.6)	v.fine, fine, medium 7 (0)
: pore %	0.21% (0.03)	2.0% (0)	0.2% (0.2)	0.1% (0)
Roots : abundance	few 1 (0)	few 1 (0)	common 2 (0.6)	few 1 (0)
: size	v.fine, fine 2 (0.2)	v.fine through coarse 6 (0)	v.fine, fine 2 (1.2)	v.fine through coarse 6 (0)
: depth	41 cm (2.2)	57 cm (5.0)	64 cm (2.9)	39 cm (0)
: type	fibrous 2 (0.2)	woody, fibrous 6 (0)	fibrous 2 (1.2)	woody, fibrous 6 (0)
CaCO ₃	< 0.5% 0 (0)	< 0.5% 0 (0)	< 0.5% 0 (0)	0.5-1.0% 1 (0)
pH	4.79 (0.02)	4.60 (0)	4.87 (0.07)	5.80 (0)
Pedogenic factors	not evident 0 (0)	concretions 1 (0)	not evident 0 (0.6)	concretions 1 (0)

Table 10. Rationalised profile classification

Profile class	Horizon 2 cluster(s)	Horizon 4 cluster(s)	No. of sites	Descriptive gloss
a.	1 3 4	1 2 4	58	coherent topsoil over orange clay
b.	2	1 2 4	20	looser topsoil over orange clay
c.	1 3 4	3	3	gleyed soils
d.	1 3 4	0	2	recent alluvial soils
e.	0	1 2 4	2	thin organic layer over clay horizon

cording to the dominance of properties from either the top-soil (horizon 2) above or the sub-soil (horizon 4) below as *pombray sha* or *hundbiy sha* (qualified further for stoniness by the term *araytol* where necessary). Their discrimination rests largely on colour differences.

HORIZON 4 (Tables 8 and 9): The dendrogram indicates the existence of four variably sized clusters (of 1, 2, 3 and 77 cases), one overwhelmingly dominant, accounting for 93% of the sample. The cluster groupings are differentiated largely by colour, mottles, texture, stoniness, soil-water, porosity and root depth, as follows:

Cluster 1: Orange/bright yellowish brown, few to fine faint mottles, slightly stony (very small through medium subrounded chert), silty clay; slightly moist, low porosity, with few shallow (41 cm) woody and fibrous roots.

Cluster 2: Brown, few to medium to distinct mottles, moderately stony (small and medium rounded volcanic), sandy clay; slightly moist, moderately porous with few deep (57 cm) fibrous and fleshy roots.

Cluster 3: Greenish/bluish grey, few fine distinct mottles, almost stoneless, silty clay; wet, low porosity with deep (64 cm) fibrous roots common.

Cluster 4: Light grey, very many to coarse prominent mottles, very slightly stony (very small through medium subrounded and subangular volcanic), sandy clay; very moist, low porosity with few shallow (39 cm) woody and fibrous roots.

The cluster analysis separates some (though not all) of the anaerobic gleyed horizons from the

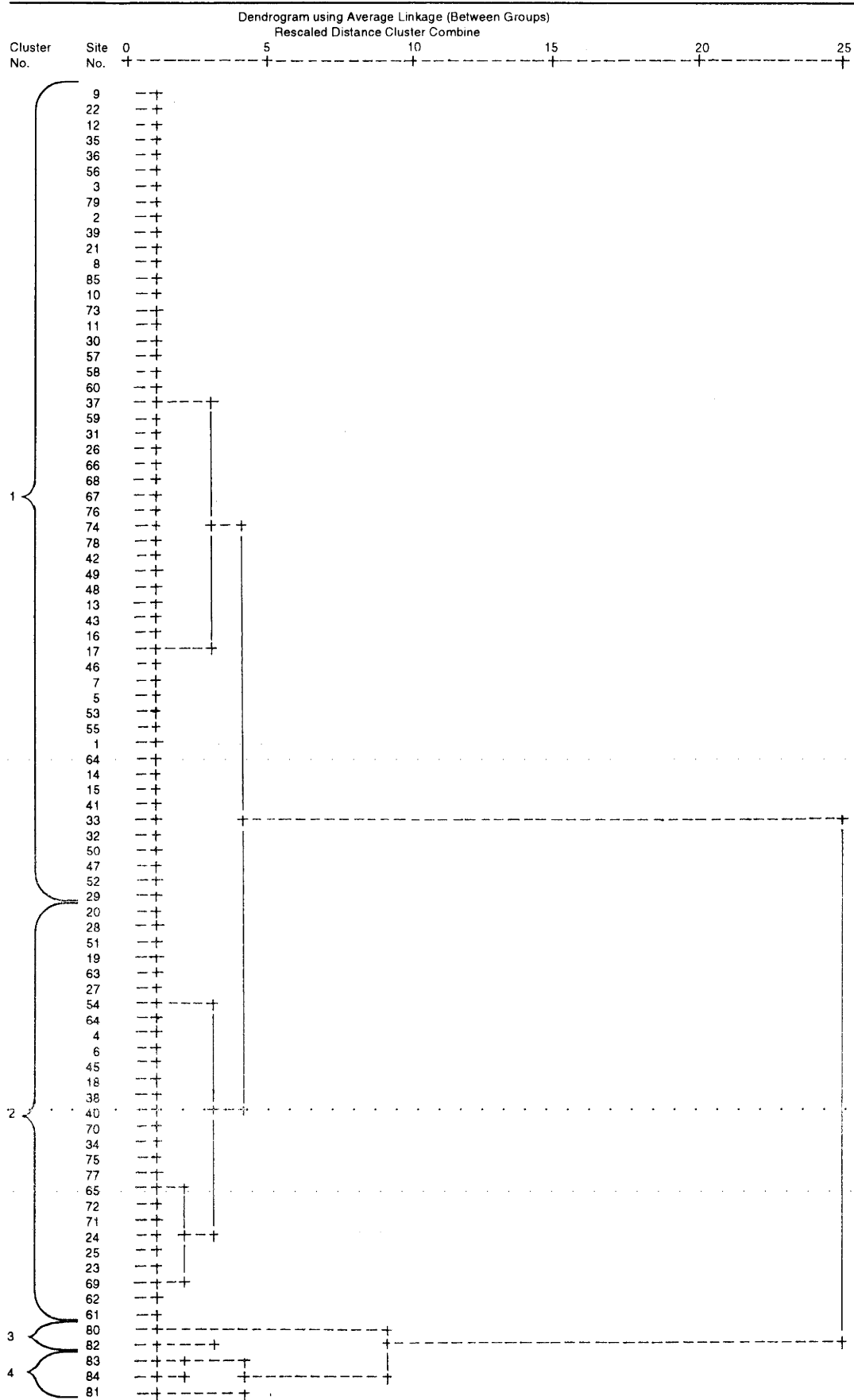
aerobic ones, which parallels a local named discrimination, between gleyed horizons called *pa tongom* and aerobic ones called *suw hundbiy*. It is difficult to see any other similarities between cluster groups and local distinctions. According to this agglomerative analysis there is little variation in horizon 4 at most locations. When we consider the extensive range of properties by which we are differentiating between horizons, these horizons are more similar than dissimilar. The homogeneity of the horizon is demonstrated further when an attempt is made to divide it into more clusters.³ At the five cluster level, differentiation between horizons depends almost exclusively on stoniness alone, the larger of the two new clusters generated being very slightly stony (1-5%) with small subrounded stones, and the smaller of them being very stony (36-70%) with large angular and subangular stones. This division parallels another distinction made by the local people, who regularly suffix a horizon designation with the word *araytol* or stony when the soil has a considerable stone content. The reverse of further division into smaller clusters is required however, if we are to come up with a manageable classification scheme, particularly given the fine distinctions made between some of the above horizon clusters and the small numbers of sites represented by them.

PROFILE CLASSIFICATION

When the horizon clusters are amalgamated together into profile sequences, a total of twenty-eight combinations results. These vary considerably in occurrence, fifty percent are represented by only one site. This classification is too cumbersome. It has too many classes defined by too many fine distinctions. It needs to be rationalised to a manageable scheme.

The following steps are taken to rationalise it: 1). Ignore horizon 1 because under cultivation it is a transitory horizon, it is lost entirely when a site is

Table 11. Cluster dendrogram for site parameters.



cultivated; furthermore, when present, this horizon evidences very little variation. 2). Ignore horizon 3 because it is a transition horizon that is often not present all all, and is infrequently identified by the local people. 3). Divide horizon 2 into two clusters; the cluster analysis justifies this with two major groups (comprising (i). cluster 2 and (ii). clusters 1, 3, 4). 4). Divide horizon 4 into two clusters; again the cluster analysis justifies this with two major groups (comprising (i). clusters 1, 2, 4 and (ii). cluster 3).

Only five of the eight possible rationalised horizon combinations occur together as surveyed PROFILE CLASSES (Table 10), as follows:

PROFILE (a): Coherent, more clayey topsoil with aggregated less porous structure; over a slightly stony and moist, faintly mottled, firm aerobic orange clay subsoil. The most abundant profile in the region.

PROFILE (b): Looser, more silty topsoil with crumbly porous structure; over a slightly stony and moist, faintly mottled, firm, aerobic orange clay subsoil. The second most abundant profile in the region.

PROFILE (c): Coherent, more clayey topsoil with aggregated less porous structure; over a wet and distinctly mottled, very sticky anaerobic greenish-grey subsoil. A waterlogged and gleyed profile. An uncommon profile in the region.

PROFILE (d): Coherent, more clayey topsoil with aggregated less porous structure, extending to considerable depths (>50 cm). A recent alluvial profile. An uncommon profile in the region.

PROFILE (e): Thin organic horizon 1; over a slightly stony and moist, faintly mottled, firm aerobic orange clay subsoil. An uncommon profile in the region.

SITE VARIATION

The generation of an overall classification of soil resources as perceived by the local people requires the combination of the above profile classes with site parameters. This demands firstly the establishment of some patterned variation between the sites surveyed. Again, a series of preliminary cross-tabulations of those parameters that might reason-

ably be expected to show some degree of relatedness in their variation evidenced surprisingly little patterning, other than the obvious. A subsequent principal components analysis of SITE VARIATION, gave the following results:

SITES: The first three principal components account for 53% of site variation (thirteen factors were required to account for 100%). The first principal component represents the related factors of drainage and local relief, together with altitude. The second principal component represents the related factors of vegetation and litter form and depth. And the third principal component represents rock outcrops, and to a lesser extent surface evenness. In summary, we can characterise the variation that occurs between sites as due principally to differences in their relief and drainage, altitude and vegetational factors, plus outcropping rock to a lesser extent.

SITE CLASSIFICATION

The next step involves the creation of site classes. Again, a cluster analysis was used. The dendrogram (Table 11) indicates the presence of two major site groupings, both of which can be divided at a considerably lesser distance into two further groups, to give four clusters. The variation between the two major groupings (clusters 1 and 2, and 3 and 4) centres on differences in altitude and parent material, whereas variation between the two clusters comprising each of these major groupings centres largely on differences in aspect and slope, and to a lesser extent drainage, relief and vegetation.

The number of sites in each cluster varies considerably. The skewedness of the distribution of sites between the clusters reflects the overriding importance of higher altitude locations to the Wola. The greater part of their territory is in the highlands, the vast majority live and cultivate here. These site clusters are not as useful as they might be, the agglomerative program concentrating on the few strikingly different sites from lower altitudes at the expense of the more numerous high altitude sites. Doubling the number of clusters to eight to overcome this problem gives too many classes to produce a manageable classification when combined with the soil profile classes. It was decided to combine all the low altitude sites (<1500 m) into a single group of varied sites to overcome this problem. This reduces the site classes down to five, and possible soil resource classes to twenty-five. The

Table 12. The mean/predominating parameters of site clusters.

	Previous cluster 1		Previous cluster 2		Previous cluster 3 & 4
	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Altitude	2015 m (8)	1815 m (12)	1983 m (10)	1770 m (21)	1230 m (102)
Aspect	73° (9)	68° (7)	311° (12)	300° (16)	260° (57)
Slope	23° (2)	24° (2)	18° (3)	12° (4)	8° (8)
Slope form	straight (1 (83%))	straight 1 (70%)	straight 1 (56%)	straight 1 (73%)	straight 1 (100%)
Surface evenness	fairly even 1 (40%)	fairly even 1 (67%)	fairly even or hummocky 1, 3 (69%)	fairly even with obstacles 2 (46%)	fairly even 1 (80%)
Local relief	interfluvial: ridge top or basin side 1, 2 (57%)	valleyside: middle to footslope 6, 8 (67%)	interfluvial: ridge top or basin side 1, 2 (63%)	valleyside: footslope or bench 8, 9 (63%)	valleyfloor floodplain or valleyside bench 9, 11 (80%)
Drainage	normal 2 (0.2)	normal 2 (0.20)	shedding 1 (0.30)	receiving, run-off 3 (0.3)	receiving, run-off 3 (0.5)
Erosion	none 0 (35%)	none 0 (50%)	none 0 (44%)	none 0 (73%)	none 0 (60%)
Rock outcrops	none 0 (0)	none 0 (0.2)	none 0 (0.3)	none 0 (0)	none 0 (0)
Parent material	limestone 1 (96%)	limestone 1 (87%)	limestone 1 (94%)	limestone 1 (91%)	limestone 2 (60%)
Vegetation	secondary regrowth 2, 3, 4 (52%)	grasses or crops (sweet potato) 4, 7 (63%)	secondary regrowth 2, 3, 4 (63%)	secondary regrowth 2, 3, 4 (46%)	secondary regrowth or crops 2, 4, 7, 9 (80%)
Litter form	bare soil/tree leaves 1, 9, 10, 11 (52%)	bare soil 1 (33%)	bare soil/tree leaves 1, 9, 10, 11 (50%)	bare soil/tree leaves 1, 9 (64%)	tree leaves 9, 10, 11 (60%)
Litter depth	~ 1 cm (0.2)	~ 1 cm (0.2)	~ 1 cm (0.3)	~ 1 cm (0.6)	~ 1 cm (0.5)

Table 13. Site classification by rationalised site clusters

	Site cluster(s)	No. of sites	Descriptive gloss
(i).	1	23	high altitude, ENE facing, up-slope locations
(ii).	2	30	mid-altitude, ENE facing, down-slope locations
(iii).	3	16	higher altitude, NW facing, up-slope locations
(iv).	4	11	mid-altitude, NW facing, up-slope locations
(v).	5,6,7,8	5	low altitude, variable down-slope locations

resulting SITE CLASSIFICATION (Table 12) is as follows:

SITE (i). (Cluster 1): Higher altitude (2000 m), east-north-east facing, steeply sloping, normally drained interfluvial site on limestone, possibly supporting secondary regrowth.

SITE (ii). (Cluster 2): Mid-altitude (1800 m), east-north-east facing, steeply sloping, normally drained lower valley side site on limestone, probably supporting grass or crops.

SITE (iii). (Cluster 3): Higher altitude (2000 m), north-west facing, steeply sloping, shedding interfluvial site on limestone, possibly supporting secondary regrowth.

SITE (iv). (Cluster 4): Mid-altitude (1750 m), west-north-west facing variably moderately steeply sloping, receiving (with some run-off) lower valley side site on limestone, possibly supporting secondary regrowth.

SITE (v). (Cluster 5): Low altitude (1250 m), variably north through west to south facing, level to steeply sloping, receiving (with some run-off), plane valley floor or bench site on

volcanics or alluvium supporting secondary regrowth or crops.

In summary, this classification divides sites by an interrelated series of parameters: altitude, local relief, drainage and slope. Higher altitude sites occupy up-slope locations on interfluvial and upper valley sides, from which, steeper sloping, drainage is good due to rapid run-off. Mid to low altitude sites tend to occupy the lower down-slope locations on valley sides and floors which are more gently sloping and from which drainage is more likely to be poor (Table 13).

SOIL RESOURCE CLASSIFICATION

The final step in this investigation of the surveyed soil data requires the combination of the soil profile and sites classifications to generate an overall soil resource classification, which we can compare with local people's perceptions of, and agricultural use of, their land. Fourteen of the possible soil profile and site class combinations are represented (Table 14). Some of these SOIL RESOURCE CLASSES were represented in the surveyed sites considerably more often than others, occurring from twenty-one times down to once only.

Table 14. The distribution of sites surveyed between soil resource classes

Soil profile classes	Site classes				
	(i)	(ii)	(iii)	(iv)	(v)
(a)	16	21	11	8	2
(b)	7	8	3	1	1
(c)		1		2	
(d)					2
(e)			2		

Table 15. The distribution of local assessment and land use classes between the soil profile and site components of the soil resource classes distinguished in this study.

	Soil resource classes									
	Soil profiles					Sites				
	a	b	c	d	e	i	ii	iii	iv	v
Local assessment class:										
1. very good	10	2		2		2	5		2	5
2. good	15	3				7	5	3	3	
3. middling	6	2				1	6	1		
4. poor	12	6				4	8	5	1	
5. very poor	14	6			2	9	5	7	1	
6. waterlogged	1	1	3				1		4	
Land use class										
1. never cultivated	12	2	2		1	5	2	5	4	1
2. long abandoned garden	20	4				8	9	3	3	1
3. recently abandoned garden	10	6		1		5	6	4	1	1
4. sweet potato garden (inc. fallow)	14	8				5	13	2	1	1
5. taro garden	1		1	1					2	1
6. mixed garden	1				1			2		

SOIL RESOURCES AND LOCAL SOIL ASSESSMENTS

We are now in a position to assess the status of Wola assertions regarding their non-inspection of soil before cultivating it, by comparing the computer generated soil resource classes with local assessments of the cultivation value of the soils surveyed and the use to which they actually put the land. A cross-tabulation of local assessments of soils against the soil resources classes revealed no apparent relationship. It appears that none of the soil resources classes painstakingly distinguished correlates with any local assessment class, the very best and worst soils are likely to occur in almost all the soil resource classes. We cannot say that any of the classes in which the majority of soils surveyed fall represent better or indifferent arable soils. The exceptions have too few sites to allow us to draw reliable conclusions. But there are some trends noticeable upon inspection which merit comment (Table 15 - soil profile and site classes are separated to make comparison easier).

The soil profile class (a) 'coherent topsoil over orange clay' soil profile predominates over the

entire spectrum of classes, except for (6). waterlogged soils. But the ratio to profile class (b) 'loose topsoil over orange clay' changes as assessment falls, from 4:1 for assessment classes 1 and 2 to 2:1 for classes 4 and 5. In other words, any soil resource class featuring loose topsoil is more likely to be judged an agriculturally poor soil.

The predominant sites in all local assessment classes, except for (6). waterlogged soils, are (i) 'high altitude ENE facing up-slope sites' and (ii) 'mid-altitude ENE facing down-slope sites'. The feature they have in common is aspect, and this complies with Wola assertions that the best arable land faces the sun to the north-east. The predominance of sites with this aspect reflects the non-random selection of the survey sample, which strived to accommodate all local land usages; hence it includes a large number of cultivated or once cultivated sites, which have this favoured aspect. But aspect alone is not sufficient to give a soil agricultural promise, and sites facing in a north-easterly direction cover the entire range of assessment from good to poor. The distribution of the next site class (iii) 'high altitude NW facing up-slope sites' between good and poor assessment classes

further illustrates the importance of aspect, for these sites are twice as likely to occur in the poor classes 4 and 5 as they are in the good classes 1 and 2.

The low altitude sites (v) occur without exception in the first-class local assessment category. Although they are too small a sample to draw firm conclusions from, they reflect Wola assertions that sites occurring at lower altitudes are better, that crops grow more quickly there. They say that they avoid them because they fear sickness (notably malaria) and also because they are adjacent to the region of the Foi people whom they fear as sorcerers. Higher temperatures contribute to the perceived increase in agricultural productivity, but people attribute it in part to the occurrence of larger areas of favourable land too. A considerable part of this lower region has recent alluvial soils, and soils surveyed in this profile class (d) fall into the best local assessment class 1.

The soil profile class (e) 'thin organic layer over mineral horizon' predictably falls into the worst assessment class 5. And profile class (c) 'gleyed soils' predominates in local assessment class 6 of waterlogged soils suitable for taro cultivation. All the soils occurring in this assessment class fall as expected in the down-slope locations of site classes (ii) and (iv) where drainage is more likely to be poor. It is the uncommonly occurring alluvial, gleyed and skeletal soils that display a certain predictability regarding their local assessment; the majority of sites surveyed show scant pattern. Furthermore, it seems dubious to build an argument on the basis of local assessments of soil potential, when the people themselves both deny that they inspect the soil before they decide whether or not to cultivate it, and it is suggested that they are possibly unaware of any pedological judgements they make. We can overcome this objection to some extent by comparing the soil resource classes against land use.

SOIL RESOURCES AND LAND USE

The use people make of land is equivalent to their assessment of its worth in practice, rather than hypothetically (although this approach has shortcomings too, for we cannot simply equate cultivation of land with good soil, because the condition of the soil may have deteriorated under cultivation from what it was before clearance; nor can we equate recently abandoned plots with poor soil, because factors other than soil-related ones can

prompt abandonment). The fourteen land use classes distinguished in the survey (Table 1) are too many for ready comparison and they are reduced to six for analysis (Table 15). Again, the initial impression of a cross-tabulation is that no land use predominates in any of the soil resource classes, which suggests that none of them are indicative of good or poor arable soils. But there are once more some trends worthy of comment.

The soil profile class (a) 'coherent topsoil over orange clay' again predominates over the entire spectrum of land uses. There is no indication that a larger proportion of the soils in this class are likely to be under cultivation rather than under secondary regrowth or primary forest, they are fairly evenly spread. The profile class (b) 'loose topsoil over orange clay' is not so evenly distributed, the figures suggesting that it is likely to be cultivated, with a ratio of 2:3 sites cultivated: uncultivated, compared to 1:3 sites cultivated: uncultivated for soil profile class (a). This contradicts the trend of the local soil assessment comparison where any class featuring the loose topsoil is more likely to be assessed as agriculturally poor. This may be explained, at least in part, by the larger proportion of (b) profile class soils coming from recently abandoned gardens (at a ratio of 1:2 recently abandoned sites to other land use classes, compared to 1:4 for profile (a) class soils). This suggests that a larger proportion of them might be judged as agriculturally tired soils on which cultivation has been stopped for an interval to allow them to recover. It is also likely that some of the soils under cultivation were showing signs of declining productivity, and with a large proportion of soil profile class (b) soils under cultivation there is an increased chance of them showing signs of becoming productively poor soils.

There is a wider spread of different land uses across the various site classes than across the soil profile classes (Table 15). There is perhaps a weak trend for down-slope sites to be preferred over up-slope sites for cultivation. The aspect preference is again evident, with a greater proportion of north-east facing sites under cultivation and north-west facing ones under natural vegetation. The land under primary forest and never cultivated covers the whole range of soil-site classes, indicating that none of the soil resource classes identified is either the product of cultivation nor is so preferred above others and widely used as to occur less commonly under virgin forest. It also suggests adequate availability of sites adjudged suitable for cultivation by the Wola. The low altitude soils also show an

even spread over the land use range. The position with wet soils and sites under taro is not so clear-cut as might be anticipated, the multivariate analysis not assigning all wet soils to the gley class, some evidencing more properties akin to another class.

CONCLUSION

This comparison of local assessment and land use against a computer-generated soil resource classification evidences surprisingly little correlation where some might have been anticipated. We cannot tell the local Wola people, using the soil resource classification painstakingly built up by analysing data on their soils, what they might unwittingly look for in selecting a site for cultivation. The analysis has strived to identify a series of soil and site types, to uncover some hidden pattern underlying them that might relate to soil potential and cultivation use, and it has largely failed for the vast majority of soils to reveal anything other than a few trends, some of which are fairly weak and tenuous.

In some regards this may be deemed a negative result, the study be thought to have somehow failed. But only to those who assume the superiority of Western environmental scientific method, that it should come up with a more insightful and informed interpretation of soil resources than the people who for generations have successfully derived their livelihood by exploiting them. The analysis vindicates the opposite viewpoint, that the knowledge of local people is just as well informed. Regardless of efforts to generate a scientifically grounded appraisal of soil resources, this series of papers has failed to go beyond what the local people say about them. They see no point in inspecting soil closely before cultivating it, not because they are unaware of possible variations in fertility status, but because there are no observable properties, taken singly or in combination, by which they might classify and readily assess the agricultural potential of the majority of their region's soils.

Finally, and perhaps most importantly, this series of papers, demonstrating that a scientific survey and computer analysis cannot better local lore, lends support to those who advocate local participation in programmes of sustainable agriculture development (Eyben & Ladbury 1992). It shows that the proposition that experts should respect local knowledge and consult it closely, before they try to improve on it, has substance (Thomasson 1981; Chambers *et al.* 1989; Skoog *et al.* 1990) no matter how impossible that knowledge may first appear.

FOOTNOTES

¹ The Wola are familiar with such ranking procedures, having a series of linguistic markers to indicate gradations (e.g. *ebay ora* very good, *ebay* good, *ebay sha* middling, *kor* poor, *kor ora* very poor and *suw pa* waterlogged).

² In Tables 3, 5, 7, 9 and 12 each entry comprises two rows. The top row gives the cluster average for each soil property, and the lower row the mean class score and standard error, or where more appropriate, the class percentage. Figures outside brackets in the lower row are property mean class scores, or the predominant survey class number for non-averageable variables. These numbers refer to the list order of parameters in the *Soil Survey Field Handbook* (except for none/non-relevant which score zero). The figures inside brackets are either standard errors of the means, calculated as $\sigma/\sqrt{N}$ (the larger the standard error value the wider the mean distribution and the less representative the mean of any property for the entire cluster), or they show the percentage of the cluster falling in the predominant class listed. (percentages are used where properties vary non-linearly and discontinuously, and could not be sensibly averaged into means with associated standard errors). Properties which did not vary to any extent within a sample (e.g. cementation) or were entirely absent (e.g. mottles from horizon 1) were omitted from the analysis as having no effect on variance.

³ At the five cluster level, the large cluster 1 divides into two groups comprising 10 and 67 sites. The larger of these clusters remains surprisingly resistant to further splitting, the next three divisions splitting off just one or two sites. The mean values and standard deviations of properties for the two groups generated with the splitting in two of cluster 1 further support the conclusion that the members of this large horizon 4 cluster are very similar on the whole, for they are almost identical for all properties except stones. On the basis of this analysis it was decided not to press the division of horizon 4 beyond four clusters, an urge prompted more by an aesthetic need to achieve a better numerical balance between clusters than by pedological considerations. It is common in soil surveys to find that one class of soil predominates in a region over others; the skewedness of this sample reflects nature's irregular distribution.

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THE TOTAL MERCURY CONCENTRATIONS IN FISH FROM CERTAIN SOUTHERN COASTAL WATERS AND NORTH SOLOMONS PROVINCE OF PAPUA NEW GUINEA.

Ian Ini Onaga¹

ABSTRACT

Total mercury concentrations using potassium permanganate digestion in barramundi fish (*Lates calcarifer*) from Western Province were found to be higher than those from Gulf province. Some individual barramundi from Western province had total mercury levels in the excess of the WHO recommended limit of 0.50 micrograms per gram (ug/g) based on wet weight (WW). Jewfish or croakers (*Sciaenidae*) and threadfins salmon (*Polynemidae*) from Gulf province had mercury concentrations within the acceptable limit. Mercury levels in one area was quite high. The mackerel (*Scombridae*) fish from Mullins Harbour, Milne Bay Province had their mercury levels ranged from 1.81 - 3.59 ug/g WW and the mean concentration was 2.60 ug/g WW. Some of the barramundi caught in the Mullins Harbour had also been found to have mercury concentrations above 0.50 ug/g WW.

Key words: Barramundi fish (*Lates calcarifer*), jewfish or croakers (*Sciaenidae*), threadfins salmon (*Polynemidae*), mackerels (*Scombridae*), mercury concentrations, flameless atomic absorption spectrophotometer, cold vapour generation unit.

INTRODUCTION

The importance of mercury in the food system has become better understood in recent years. Inorganic and organic mercury derivatives from anthropogenic sources or as effluent from industrial wastes end up in the sediment of lakes and rivers. These derivatives are converted by chemical reactions or by the action of microbes into the organic compounds such as methylmercury, which are very poisonous to animal life (Goldwater 1971; Kyle and Ghani 1981; Hord *et al.* 1990).

Methylmercury, unlike the inorganic form is soluble and is transported downstream to the sea and can be taken in by the organisms such as fish, in which it may accumulate to high levels. Mercury poisoning of fish predators can occur by metallic mercury and its inorganic salts and organic mercurial compounds (Clarke and Clarke 1975; Hord *et al.* 1990).

Mercury poisoning derived from environmental and industrial sources reached major prominence in relation to human health at Minamata Bay, Japan in the early 1950's and has been referred to since then as Minamata disease (Goldwater 1971; Kyle and

Ghani 1981; Kyle 1984). It is now recognised that the use of mercury compounds in Agriculture and Industry can cause dramatic increases in mercury levels in living organisms both on land and in water (Clarke and Clarke 1975; Kyle and Ghani 1981; Hord *et al.* 1990). The most common source of mercury poisoning in man is fish.

There have been several incidents of mercury poisoning reported other than in Japan. These include incidents in the Middle East, Asia, Europe, Central and North America have led to the setting up of international controls on safe levels of mercury in fish for human consumption. (Goldwater 1971; Bakir *et al.* 1973; Hord *et al.* 1990). Fish can acquire mercury from two possible pathways, via the food chain or by direct extraction from the water across gill tissue (Clarke and Clarke 1975; Kyle and Ghani 1981). Most of the mercury form, which accumulates in fish is present in the more toxic methylmercury, because it has an ability to diffuse across cell membranes and has high fat solubility (Kyle and Ghani 1981).

The symptoms of mercury poisoning in human have been described by Petr 1978/79; Holdsworth 1975; Kyle and Ghani 1981.

Fish form a major part of the diet of a large number of coastal people in Papua New Guinea, and are an

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important export. (Kyle and Ghani 1981). The Papua New Guinea Government earns revenue of some millions of kina per annum from export of marine products. Export protocols require testing of fish samples for mercury. This is necessary to ensure that the minimum mercury level required by the destination country is not exceeded. This paper presents data derived from such analytical tests for mercury conducted at the National Veterinary Laboratory on marine products destined for export market and local consumption over a period of four years (1986-1989).

MATERIALS AND METHODS

The fish analysed were caught by commercial fishing companies during the period of 1986-1989. Most came from the mouth of the Fly river and Daru waters of Western Province, Baimuru area of Gulf Province, Yule Island waters of Central Province and Mullins Harbour of Milne Bay Province. In addition a few fish were caught in waters of the Kieta area of North Solomons Province (Fig 1, Table 1).

The fish were delivered to the laboratory as whole or filleted frozen specimens from time to time by inspectors of the Department of Fisheries and Marine Resources. A few fish specimens were received from Provincial Health Inspectors (Fig 1).

The total number of fish samples received for mercury analysis were 228, ranging in numbers from 3 from North Solomons Province to 130 from Gulf Province. The species of fish included barramundi (*Lates calcarifer*), jewfish or croakers (Sciaenidae), threadfins salmon (Polynemidae), mackerel (Scombridae) (Kan *et al.* 1989; Matsuoka *et al.* 1991) and a small number of unidentified edible fish (Table 1). Also analysed was a single mud crab (*Scylla serrata*) from Baimuru area in Gulf Province.

The Equipment

A Varian model AA-475 Atomic Absorption Spectrophotometer (AAS) was used at the wavelength of 253.7 nanometer (nm). The settings of AA-475 were double beam and peakheight with absorption mode used for reading the absorbance. The slit width (spectral Band width) and a single mercury lamp current were set at 0.5 nm and 4.0 nm respectively. A Varian model 65 Vapour Generation Unit was placed on a convenient position close

to the AAS and the inert gas (nitrogen) connected to it at a pressure of 1.4 KG/CM². The flow-through mercury cell assembly was inserted into the burner mount and aligned with optical path in the AAS (Okuno *et al.* 1972; Brodie 1979). A Varian model 9176 Recorder was also used to record the peakheight readings.

Sample Digestion

The digestion method was described by (Meir 1976). Duplicate samples 2.0-5.0 grams (g) of fish muscle was weighed into clean 125 millilitre (mL) graduated Erlenmeyer flasks. About 20 mL of AR grade nitric acid was added and digested at room temperature with occasional swirling to break the lumps of sample and left over night. On the following day 40 mL of 5 percent (w/v) potassium permanganate solution was added with occasional swirling to reduce frothing. An additional 2.0 g of solid potassium permanganate was added to samples which were high in fat. The mixture was left overnight again for digestion to continue. An extra 20 mL of permanganate solution was added on the following day and the mixture placed in a 60°C waterbath for 30 minutes, which destroyed any remaining froth. The flasks were removed from the waterbath and placed in a tray with cold water to cool rapidly to room temperature and 6-10 mL of hydroxylamine solution was added to remove excess permanganate and manganese oxide. The solution was made up to 100 mL with the distilled water and analysed for mercury using an atomic absorption spectrophotometer equipped with a hydride vapour generation unit.

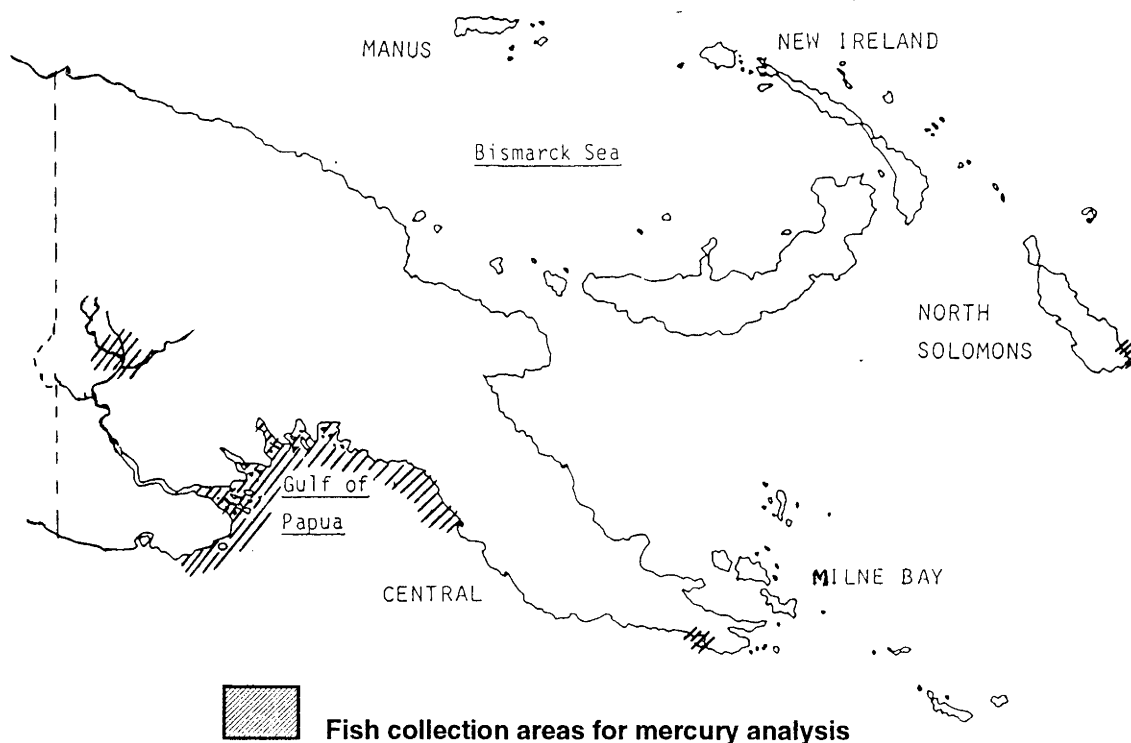
Spiked samples with known concentrations were prepared with each batch of tests to calculate full percentage recovery. The same procedure was followed with standard reference materials, namely dried ground dogfish* and agalfish* muscles. (Kacprzak and Chvojka 1976; Brodie 1979; Evans *et al.* 1986).

All glassware used had been previously soaked overnight in a hot solution containing one percent potassium permanganate and 5 percent (v/v) sulphuric acid. On the following day the solution was discarded and hydroxylamine solution added to remove the excess permanganate. Finally the

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Figure 1. Map of Papua New Guinea



glassware was thoroughly rinsed with distilled water and dried in an oven.

Standard Preparation and Sample analysis

A stock mercury solution of 1000 ug/ml mercuric nitrate, Spectrosol, British Drug House (BDH) was used for mercury standard. An intermediate mercury standard of 0.10 ug/ml was made up with 5 percent (v/v) nitric acid, AR grade. The working standard mercury solutions of 1, 2, 4, 8, 12 and 16 ng/ml were prepared with 5 percent (v/v) nitric acid.

The AAS was calibrated to zero absorbance before reading the standard and sample solutions. Twenty millilitre (mL) of the blank, standard or sample solution was added the reaction vessel of the cold vapour generation unit. One millilitre of stannous chloride solution (w/v) was injected through the septum and the magnetic stirrer switched on for 90 seconds. The inert gas was purged through the reaction vessel to transport the mercury vapour into the flow-through cell. After an integration period of 10 seconds, the absorbance and peak height were read simultaneously. The reaction vessel was

thoroughly cleaned with distilled water before the next sample was analysed using the same procedure.

RESULTS

The mercury concentrations of the two reference standard materials analysed were $0.843 \text{ ug/g} \pm 0.079 \text{ ug/g WW}$ for dogfish and $0.49 \text{ ug/g} \pm 0.6 \text{ ug/g WW}$ for agalfish. The values are in close agreement with the manufacturers values of $0.798 \text{ ug/g} \pm 0.074 \text{ ug/g WW}$ for dogfish and $0.48 \text{ ug/g} \pm 0.06 \text{ ug/g WW}$ for agalfish, with recoveries of 105 percent and 102 percent respectively.

The mean recovery of mercury concentrations from spiked samples was 110 percent ranging from 90-117 percent which confirms that no mercury was lost during the process of digestion and analysis.

The results of the analysis over the testing period are summarised in Table 1. Results quoted are mean values for duplicate analyses. No comparative and statistical analyses of the data have been attempted due to the bias sample sizes from differ-

ent provinces. Fish from Milne Bay have the average mercury concentrations of 2.60 ug/g WW. The mercury concentration analysed for a single mud crab (*Scylla serrata*) was 0.01 ug/g WW.

DISCUSSION

Fish are an important export commodity and revenue earner for the country and also form an essential part of the basic diet for coastal living Papua New Guineans. Because of the danger from on-going mining industry, for example in Western Province and for public health reasons in general, chemical analysis was important to determine the levels in heavy metals such as mercury and its edibility of the fish. Testing of such foods as fish is necessary due to an increasing awareness by society to the dangers to human health of heavy metals, such as mercury in the diet and the potential for fish to have dangerously high levels, particularly where caught in waters associated with mining ventures (Anon. 1989).

There is no universally accepted safe level of mercury in fish for human consumption; each country has its own standard (Petr 1978/79; Kyle 1984). However, the recommended limit set by the World Health Organisation (WHO), and adopted by such countries as Australia, is 0.50 ug/g WW (Kyle and Ghani 1982). Because various countries have their own regulations concerning the safe limits of mercury, the fish which were being exported had continually been tested for mercury to meet the required levels for the country of destination. In the present study the WHO levels were exceeded only in the Milne Bay area are in mackerel, with 6/6 samples exceeding 0.50 ug/g level. Barramundi from the same area had mean levels 0.48 ug/g WW, with 3/4 exceeding the 0.50 ug/g level.

Several studies into the mercury levels of fish have been conducted in various localities of Papua New Guinea. In a survey sponsored by the then Department of Primary Industry in 1972-74, Kyle and Ghani (1982) found the total mercury concentrations ranged from 0.32-0.57 ug/g WW in 31 barramundi from Lake Murray, Kaweto and Fly estuary of Western Province was in the excess of the World Health Organisation (WHO) recommended limit of 0.5 ug/g WW (Kyle and Ghani 1982).

Lamb (1977) found mercury levels of 0.026-0.18 ug/g WW in nine species of fish sampled from OK Tedi and Upper Fly River area, with one barramundi

from Lake Murray having 0.494 ug/g WW (Lamb 1977). Reynolds and Price (1974) reported total mercury levels in some 214 samples of barramundi from Lake Murray, lower reaches of the Fly River and coastal waters around Daru contained high mercury levels, whereas low mercury concentrations were seen in fish from Baimuru and Kikori waters, Gulf Province. Kyle and Ghani (1984/85) also found that the total mercury concentrations vary with location from Gulf of Papua.

The present data collected between 1986 and 1989 show that the mean total mercury levels of fish (barramundi) from Western province were below the WHO recommended limit but the limit was exceeded in individual fish (Table 1).

None of the four species of fish (barramundi, jewfish or croakers, threadfins salmon and mackerel) from Gulf Province exceeded the WHO recommended level; the maximum level in an individual fish (barramundi) was 0.29 ug/g WW. Mercury levels of barramundi and of unidentified fish tested from Central and Bougainville Provinces likewise were below 0.50 ug/g WW and, as in Gulf Province, the fish with the highest levels were barramundi.

The highest levels of mercury recorded in the present data were in fish from Mullins Harbour, Milne Bay Province. A mean of 0.48 ug/g WW was found in barramundi, while mackerel tested from this locality had mercury levels ranged from 1.81-3.59 ug/g WW and mean concentration is 2.60 ug/g WW which is not safe for human consumption. There is no mining activity in the area so it has to be assumed that the fish acquired the mercury from non anthropogenic sources. These findings warrant investigations to determine the source of the mercury in the Mullins Harbour area.

As barramundi (and mackerel) are migratory fish it is possible that mercury was acquired from a locality other than Mullins Harbour. Another factor to consider is that mercury accumulates in the bodies of fish over time; the levels of mercury in a fish can therefore be linked to age. It needs to be ascertained if barramundi for example, are caught at an older age than most other edible fish and whether mackerel of any age have high mercury levels in the Mullins Harbour area (Petr 1978/79; Lamb 1977; Kyle and Ghani 1981).

Although the only mud crab (*Scylla serrata*) tested had low level of mercury there is a need to investigate and determine the mercury levels of such

Table 1. Total mercury concentration in various types of fish from provinces indicated.

PROVINCE	TYPE OF FISH	NO. OF	MERCURY CONCENTRATION	MERCURY CONCENTRATION
		SPECIMEN	MEAN, ug/g WW	RANGE, ug/g WW*
WESTERN	BARRAMUNDI	80	0.25	(0.02 - 1.00)
	(<i>L. calcarifer</i>)	(75)	(0.21)	(0.02 - 0.43)
		(5)	(0.54)	(0.51 - 1.00)
GULF	BARRAMUNDI	56	0.11	0.02 - 0.29
	JEW FISH OR	36	0.08	0.01 - 0.12
	CROAKERS (<i>Sciaenidae</i>)			
	THREADFINS	34	0.04	0.01-0.10
	SALMON (<i>Polynemidae</i>)			
	MACKEREL	4	0.06	0.05 - 0.07
	(<i>Scombridae</i>)			
CENTRAL	BARRAMUNDI	3	0.33	0.27 - 0.41
	WHOLE FISH	2	0.10	0.02 - 0.17
	(sp. unidentified)			
MILNE BAY	BARRAMUNDI	4	0.48	0.36 - 0.56
	MACKEREL	6	2.60	1.81 - 3.59
NORTH SOLOMONS	WHOLE FISH	3	0.05	0.02 - 0.07

* WW - wet weight

marine bottom dwelling crustacea as crabs, prawns and crayfish as they, also, are important export commodities and form an important part of the diet of coastal people of Papua New Guinea.

The average concentrations of mercury analysed in barramundi, jewfish or croakers and threadfin salmon over the testing period between 1986-1989 (Table 1) were close to the limit of 0.50 ug/g WW set by the Australian Government and WHO. The mackerel from Mullins Harbour, Milne Bay have very high mercury levels.

Mercury concentrations of 0.02-0.2 ug/g WW may be regarded as normal for fresh water fish from

waters that are not polluted with mercury (Lamb 1977). The total mercury levels in the Western Province ranged from 0.02-1.00 ug/g WW. Thirty three percent of the samples' mercury concentrations, were < 0.20 ug/g WW. Forty five of 80 barramundi samples from Western Province had mercury concentrations ranging from 0.20-1.00 ug/g WW and 9 samples were between 0.51-1.00 ug/g WW.

This confirms the previous findings by various authors (Reynold and Price 1974; Petr 1978/79; Kyle and Ghani 1984/85) that the mercury levels in fish, especially barramundi from Western Province are excessively high. Though the sample size

between Western and Gulf Provinces differ by 24 samples the indication of the differences in the mean mercury concentrations of 0.25 ug/g WW and 0.11 ug/g WW is highlighted respectively.

On whole barramundi from Lake Murray, was found to have mean mercury concentration of 0.10 ug/g WW, though below the 0.50 ug/g WW limit the barramundi could be in its growth stage, according to the various authors' findings (Petr 1978/79; Lamb 1977; Kyle and Ghani 1981). The 36 jewfish or croakers and the 34 threadfish salmon specimens analysed from the Gulf Province for the total mercury concentrations showed in the range of 0.01-0.12 ug/g WW and 0.01-0.10 ug/g WW respectively. The fish were safe for human consumption because the levels were well below the WHO recommended value of 0.50 ug/g WW.

The results from other provinces cannot be compared due to the bias sample sizes. However the Barramundi samples from Yule island, Central and Mullins Harbour, Milne Bay Provinces show elevation in the mercury concentrations, which require investigation of the mercury sources in this area. The mackerel samples from Mullins Harbour in Milne Bay province showed excessively high mercury levels. A thorough study is required to investigate the cause of considerable high level of mercury in Mullins Harbour, Milne Bay Province. Three samples of whole fish (sp. unidentified) from Take village in the Kieta area of North Solomons Province were submitted for mercury test and the analysis showed that the mercury levels ranged from 0.02-0.07 ug/g WW.

CONCLUSION

The mercury concentrations in some of the barramundi fish (*Lates calcarifer*) in Western Province were higher than barramundi fish from Gulf Province. The fish from Milne Bay Province had levels of mercury, which exceeded the WHO recommended limit of 0.50 ug/g WW. Further investigations are needed to determine the cause of elevated mercury concentration in the fish from this Province. None of the 135 fish sampled from Gulf or Central Provinces exceeded the WHO recommended mercury concentration of 0.50 ug/g WW. In Western Province, 6 percent of barramundi sampled, exceeded this concentration.

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DISTRIBUTION AND ABUNDANCE OF ANTS IN A BRAZILIAN SUBTROPICAL COFFEE PLANTATION

J D Majer¹ and MV B Queiroz²

ABSTRACT

*The ground and arboreal ant fauna were surveyed by pitfall trapping, tree beating and by baiting in a 400 m² area of coffee plantation at Viçosa, Minas Gerais, Brazil. A total of 37 ant species were sampled in the plantation, with 29 being present on the ground and 12 on the trees. Only four species were common to both strata. The biscuit/honey/fish baits which were placed on the ground and in trees were largely exploited by ground- and tree- dwelling ants respectively. Maps of the distribution of arboreal ants suggested that the most frequently occurring ants were distributed in a mosaic-like manner. However, the numbers of ant individuals in tree-beat samples suggested that, with the possible exception of *Crematogaster* sp. 59, none of the species reached the numerically dominant status of ants which have been observed elsewhere in the tropics. The possible reasons for the lack of dominant ants in this subtropical plantation are discussed and the overall findings are then related to the potential value of ants in the limitation of pests of coffee.*

INTRODUCTION

There are many instances of ants being utilised to limit pests, both in the tropics or neotropics, and in temperate ecosystems (see reviews in Gotwald 1986, Majer 1986 and Way & Khoo 1992). However, for various reasons, most of the ant species within a region do not function as significantly beneficial species.

Finnegan (1971) lists the criteria used for evaluating predacious ant species as potential biological control agents. These are: (1) **Size**. Large size of individual ants is usually considered a desirable quality, particularly when the pest is large or well protected. If the ant has large colonies, the size of individuals is not necessarily important. (2) **Food Requirements and Nest Populations**. Species with large colonies, and hence food requirements, are considered to be the most desirable. (3) **Colonial Nests**. Species with multidomous colonies, or with the ability to produce numerous additional colonies over adjacent areas, are particularly useful. By this attribute, ants are able to occupy considerable areas at high densities. (4) **Queens**. Species with more than one queen or with a queen replacement system are considered to have longer-lived colonies. (5) **Ant-Homoptera Relationships**.

Ants which tend and encourage undesirable Homoptera often bring about results that offset any benefits.

To Finnegan's criteria we add the following: (6) **Species Habitat Range**. Species with broad habitat ranges are potentially more amenable to being promoted in areas where they are not already present. Important characteristics include the ranges of temperature, moisture and insolation that can be tolerated, and also the ability to tolerate seasonal fluctuations in these factors and in food resources. (7) **Dominance Hierarchy**. Species that are unlikely to be outcompeted by other ants in the crop are desirable.

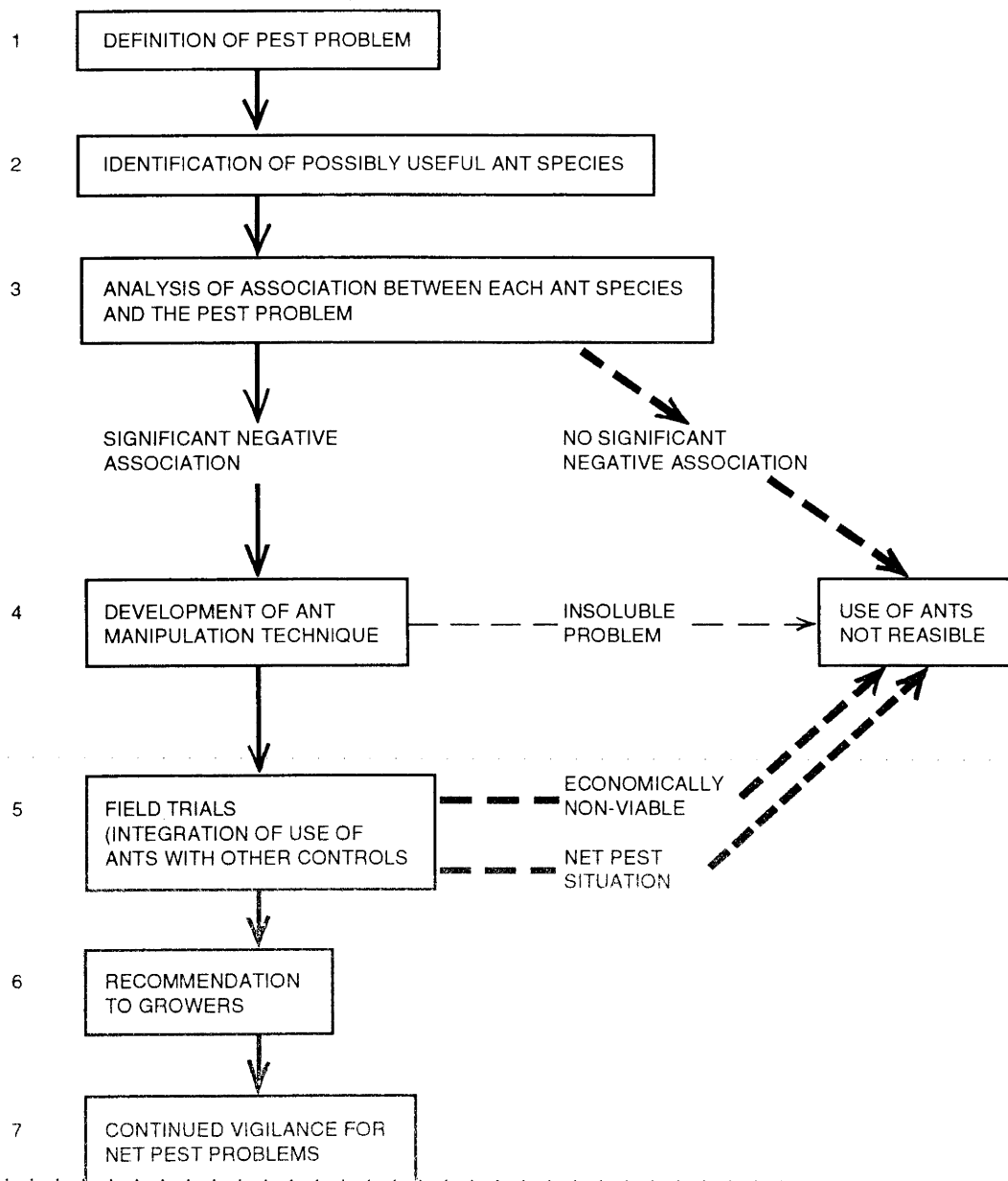
Room (1973) has drawn up a formalised scheme for selecting and developing ants as pest control agents. His scheme is shown in Figure 1. **Stage 1** involves definition of the pest or the pest complex. The biology of the pest is evaluated and their interaction with the crop is elucidated. **Stage 2** involves identification of potentially useful ant species. **Stage 3** is concerned with demonstrating whether or not any ant species has controlling effects on the pest complex. This may be evaluated by a sampling program designed to show how ant and pest species are distributed with respect to each other. Researchers are warned of spurious ant control effects resulting from ant and pest having different habitat preferences rather than from the ant having any direct negative influence on the pest.

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Figure 1. Suggested scheme for the selection and development of an ant as a pest control agent (redrawn from Room, 1973).

STAGE

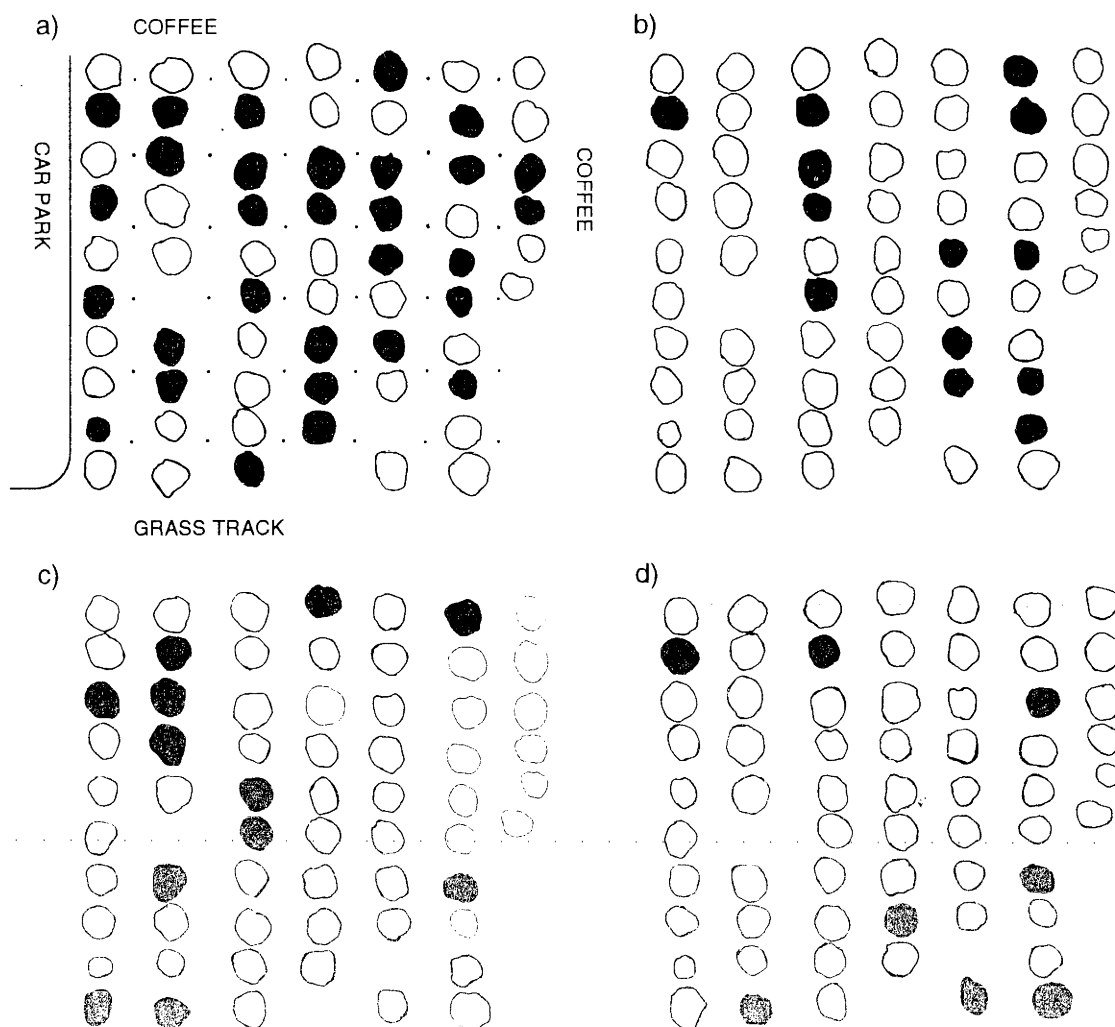


If a beneficial ant is revealed, the scheme enters **Stage 4**. Here techniques are investigated to manipulate the ant distribution in order to favour its spread. This is the most difficult stage to carry out. **Stage 5** is reached when field trials are performed to evaluate the practicality of ant manipulation and the efficacy of the control. The ant-based biological

control method may now become incorporated into a wider integrated pest management scheme. Finally, recommendations are made to growers on how to apply the control scheme, and for vigilance for new pest problems that may require modifications to the scheme.

Figure 2. Map of part of the Vicosa coffee plantation showing positions of pitfall traps () and the four most frequent species of canopy-associated ants: a) = *Crematogaster* sp. 59;

b) = *Pseudomyrmex* sp. 52; c) = *Camponotus* sp. 6; and d) = *Pseudomyrmex* sp. 50



Although the possibility of using ants in cocoa pest control has received some attention in the Brazilian State of Bahia (see review in Delabie 1990), and the Kayapó Indians have used ants of the *Azteca chartifex* gp. to limit leaf cutter ants in the State of Pará (Overal and Posey 1984), this topic has received little attention in the southern parts of Brazil. The aim of this paper is to document the distribution, diversity and abundance of the ground and arboreal ant fauna in a coffee plantation in the south of the Minas Gerais State of Brazil. Such a survey forms part of Room's (1973) **Stage 2** for the evaluation of the possible use of ants as biological control agents in coffee, or other tree crops growing within this region.

STUDY AREA AND METHODS

Observations were performed in a coffee plantation within the campus of the Federal University of Viçosa, Minas Gerais (20° 44' S, 42° 54' W). The crop, which consisted of a range of varieties of *Coffea arabica*, was planted in 1970 on a loamy soil at a spacing of 1.8 x 2.8 m. At the time of the survey the plantation consisted of trees of approximately 3 m height, with a herbaceous and grass understorey. The canopy of adjacent trees was generally not contiguous. The plot had been weeded six times a year and, in November 1987, the herbicide Gramoxone® was applied to the ground layer of vegetation. The plantation had never been sprayed with insecticides.

TABLE 1: Total and frequency of the various ant species caught on the ground by pitfall trapping and on trees by beating. The percentage of ground and tree baits visited by the various ant species is also shown.

	Ground (n = 36)			Trees (n = 63)		
	Total	% Frequency	% Baits	Total	% Frequency	% Bait
Ponerinae						
<i>Gnamptogenys</i> sp. 8	52	39	-	-	-	-
<i>Hypoponera</i> sp. 24	3	8	-	-	-	-
<i>Hypoponera</i> sp. 35	1	3	-	-	-	-
<i>Odontomachus</i> sp. 45	2	3	-	-	-	-
<i>Pachycondyla</i> sp. 7	1	3	-	-	-	-
<i>Pachycondyla</i> sp. 54	1	3	-	-	-	-
<i>Pachycondyla</i> sp. 56	3	8	-	-	-	-
Myrmicinae						
<i>Acromyrmex</i> sp. 57	2	6	-	-	-	-
<i>Crematogaster</i> sp. 29*	-	-	-	-	-	10
<i>Crematogaster</i> sp. 59*	-	-	10	105	48	10
<i>Cyphomyrmex</i> sp. 23	1	3	-	-	-	-
<i>Monomorium</i> sp. 49	-	-	-	8	8	-
<i>Mycocepurus</i> sp. 20	1	3	-	-	-	-
<i>Pheidole</i> sp. 1	6	3	-	-	-	-
<i>Pheidole</i> sp. 2	12	8	-	2	3	-
<i>Pheidole</i> sp. 11	5	3	-	-	-	-
<i>Pheidole</i> sp. 21	1	3	-	-	-	-
<i>Pheidole</i> sp. 42	1	3	-	-	-	-
<i>Pheidole</i> sp. 47	-	-	10	-	-	-
<i>Solenopsis</i> sp. 10	2	6	-	-	-	-
<i>Solenopsis</i> sp. 14	28	39	-	1	2	-
<i>Solenopsis</i> sp. 15	1	3	-	-	-	-
<i>Strumigenys</i> sp. 46	1	3	-	-	-	-
<i>Tetramorium</i> sp. 43	4	6	-	-	-	-
<i>Tetramorium</i> sp. 44	3	6	-	-	-	-
Pseudomyrmecinae						
<i>Pseudomyrmex</i> sp. 33*	-	-	-	-	-	10
<i>Pseudomyrmex</i> sp. 50*	-	-	-	15	13	-
<i>Pseudomyrmex</i> sp. 51*	-	-	-	14	3	-
<i>Pseudomyrmex</i> sp. 52*	-	-	-	18	21	-
Formicinae						
<i>Camponotus</i> sp. 6*	-	-	-	2	19	-
<i>Camponotus</i> sp. 58*	-	-	-	-	-	10
<i>Brachymyrmex</i> sp. 26	1	3	-	3	2	-
<i>Brachymyrmex</i> sp. 53	11	19	10	-	-	-
<i>Paratrechina</i> sp. 40	2	6	-	-	-	-
<i>Paratrechina</i> sp. 48	-	-	10	-	-	-
<i>Paratrechina</i> sp. 56	1	3	-	-	-	-
Dolichoderinae						
<i>Iridomyrmex</i> sp. 13	-	-	10	-	-	-
Total species	-	25	5	-	9	4
		29			12	

* Denotes species which are believed to be tree nesters

Table 2. The number of ant species visiting ground- and tree-baits, classified in terms of whether they are ground or tree nesting species.

	Ant nesting habit		Total
	Ground	Tree	
Number of species at ground baits.	4	1	5
Number of species at tree baits.	0	4	4

During mid-August 1989 an area of approximately 400 m² was marked out for surveying the ants. A grid of 6 x 6 pitfall traps, spaced at 3 m intervals, was installed in this area (see Figure 2). The traps were of 2.5 cm internal diameter, contained an alcohol/glycerol preservative, and were run for 22 h from 0900 h onwards on 23 August 1989. The tree-associated ants on the 63 trees in the study plot were sampled by beating trees over a 70 cm diameter beating tray between 1000-1200 h on the same day.

In order to assess which ant species might rapidly respond to the existence of new food resources, 20 biscuit/honey/fish baits were placed at the base and in the canopy of 10 randomly selected trees within the plot. Baits were placed out at 1000 h on 23 August 1989 and the ants were collected from them at 1200 h.

The ants from all samples were sorted and counted to species level. They were determined at the generic level and then assigned code numbers to denote the individual species. The numbered reference collection is deposited in the Entomology Museum of the Federal University of Vigosa's Department of Animal Biology, and is named "J D Majer. Reference Collection".

RESULTS

Table 1 lists the 37 species of ants which were sampled and also shows the total and frequency of ants in the 36 pitfall traps (ground ants) and in the tree baits (arboreal ants). It also shows the frequency of ants observed at ground and tree baits.

Twenty nine ant species were present on the ground. Most of these were relatively restricted in the plot, although *Gnamptogenys* sp. 8, *Solenopsis* sp. 14 and *Brachymyrmex* sp. 53 were frequently sampled,

and the first-mentioned was relatively abundant in traps. Eighty one percent of the traps contained at least one species of ant.

Twelve ant species were sampled on the trees. In this stratum *Crematogaster* sp. 59, *Pseudomyrmex* spp 50 and 52, and also *Camponotus* sp. 6 were all relatively frequent, although only the first-mentioned species was abundant on trees. All species of *Crematogaster*, *Pseudomyrmex* and *Camponotus* which were sampled are believed to be arboreal nesters. Once again, 81% of trees supported at least one species of ant. Only four ant species, namely *Crematogaster* sp 59, *Pheidole* sp. 2, *Solenopsis* sp. 14 and *Brachymyrmex* sp. 26 were common to both strata.

Eight species of ants were found at baits, with five visiting those on the ground and four visiting tree baits. As indicated in Table 2, the ground baits were largely visited by ground-dwelling species and the tree baits by tree-dwelling ants. Only *Crematogaster* sp. 59 visited baits on the ground and on trees.

In addition to considering the abundance, frequency and responsiveness of ants to food resources, it is also important to consider the distribution pattern of the ants. Figure 2 shows the distribution pattern of the four most frequently occurring arboreal species. *Crematogaster* sp. 59 showed a tendency to occupy large contiguous blocks of trees, as to a lesser extent did *Pseudomyrmex* sp. 52 and *Camponotus* sp. 6. *Pseudomyrmex* sp. 50 was generally found scattered on individual trees throughout the plot. There was a tendency for the distribution of these four species to overlap each other on individual trees. Application of Fisher's Exact Test demonstrated no significant negative or positive associations between the distribution patterns of these four ant species.

DISCUSSION

Studies on arboreal ants elsewhere in the tropics have shown that plantations of tree crops generally support a range of dominant ant species (e.g. Leston 1973, Room 1971 in Ghana; Taylor 1977 in Nigeria; Jackson 1984 in Cameroon; Way 1953 in Tanzania; Greenslade 1971 in Solomon Islands; Way *et al* 1989 in Sri Lanka; Room 1975 in Papua New Guinea; and Jaffe *et al* 1986 in Venezuela). Dominant ants are species which numerically predominate to the exclusion of other ant species (Majer 1972). Furthermore, these dominant ants are usually distributed in a three-dimensional mosaic (Majer 1976a, b and c, and also see review in Majer 1986). It is the abundance of these dominant ants, and the fact that the mosaic is amenable to manipulation, that renders these tropical ants as potentially useful biological control agents.

In terms of their abundance and distribution, the ants in the Vicosa coffee plantation do not seem to conform to the trends observed in tropical tree crops. With the possible exception of *Crematogaster* sp. 59, none of the arboreal ants reached anywhere near the numerical levels noted elsewhere in the tropics. Even in the case of *Crematogaster* sp. 59, the mean number of 3.5 ants per beat sample is low compared with what would be expected in tropical tree plantations.

There are a number of reasons why ants are not abundant in the canopy of the Vicosa coffee plantation. The first possibility is that the canopy is dominated by an arboreal ant which is largely active during the night. Although we did not perform tree beat samples at night, casual observations made during hours of darkness indicated that no species of ant was particularly abundant on trees during this period.

The second possibility is that we may have sampled ants during a period of low ant activity. However, monthly pitfall trapping in this plantation has indicated that August is not a period of low ant activity (MVB Queiroz unpublished data).

The third possibility is that arboreal ants simply do not reach the levels of abundance which has been observed in more tropical regions. This is certainly the case in the subtropical part of northern Australia where, with the exception of *Oecophylla smaragdina* and to a lesser extent *Crematogaster* spp., ants are not abundant in the canopy of tree crops and rainforest trees (Majer 1990). Our observations in

tree crops and in secondary forest elsewhere in the Vicosa region suggest that this is the most likely explanation, although the causal factor for this phenomenon is not yet known.

Crematogaster sp. 59 is the only arboreal species which is sufficiently abundant and widespread in the plantation to show any potential value as a biological control agent. It is also fortuitous that it feeds both on the ground and on trees. This means that it could play some role in the limitation of both tree-dwelling and ground-dwelling pests, or alternatively in the limitation of a pest which occupies both the ground and trees.

The observations made at Vicosa do not concur with those made in cocoa in Bahia where members of the *Azteca chartifex* gp., *Azteca paraensis*, *Crematogaster* spp., *Ectatomma tuberculatum* and *Wasmannia auropunctata* can be abundant on trees (Delabie, 1990 and unpublished data). Bahia, however, has a more tropical climate than does the Vicosa region. Finally, the observations made at Vicosa are of a preliminary nature. They are presented here to provoke discussion and it is hoped that further work will follow in order to confirm or refute our observations. Only after further work is carried out will it be possible to evaluate whether any species of ants have potential value for control of pests in tree crops growing in this region.

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A CATALOG OF THE TESSARATOMIDAE OF THE WORLD

L. H. Rolston^{*}, R. L. Aalbu, M. J. Murray and D. A. Rider[†]

PREFACE

The tessaratomids are primarily denizens of the Afrotropical, Indomalayan and Oceanian realms, although there are representatives in Australia and the Neotropics. In number of species, the family is moderate in size, containing about 235 species.

Most tessaratomid species are large and a few are agricultural pests; yet the taxonomy and phylogeny of the family have been relatively neglected, perhaps because the concentrations of taxonomists and tessaratomid species do not coincide. A surprising number of taxa appear only once in the primary literature. There is also a surfeit of uncertain synonymy as well as a vagueness concerning phylogeny. Perhaps this catalog will encourage taxonomic research on the family by easing the onerous task of searching for relevant literature.

INTRODUCTION

This synoptic and reference catalog of the Tessaratomidae of the world covers the literature from 1758 to 1990, inclusively, omitting intentionally only references to purely applied works and to anatomical or physiological works unless they concern the salivary or scent glands. However, with the above exclusions, papers appearing after 1990 that came to our attention are also included. We attempted to verify every reference. The few we did not see are so annotated in the bibliography.

Users of the catalog are reminded, perhaps unnecessarily, that this presentation of the Tessaratomidae is a composite reflecting the opinions and abilities of many authors over many years. The result is an overview of the family that is probably close to reality, but with certainty it is neither complete nor entirely accurate. The usual caveat as to the fallibility of the compilers is also pertinent.

We have been guided in classification at the family - group level by the work of Kumar, and Kumar and Ghauri. The arrangement of the catalog, summarized in Table 1, is alphabetical with miscellaneous categories at the end. The taxonomic literature has been accepted uncritically for the most part. Documented misdeterminations are entered in the cata-

log under both the correct and incorrect taxa, with a reference to the correct taxon following the entry under the incorrect taxon. The authority for the correction is noted, as is the authority reducing a name to the status of junior synonym. Subsequent verification of synonymy may also be indicated. As catalogers we have been neutral insofar as possible. However, where synonymy has been declared but inadequately supported we have treated all taxa involved as valid, at the same time noting that this position is not accepted by all.

The content of each reference is usually indicated cryptically or by fuller annotation unless it is obvious, as in the description of a new taxon. In accordance with the International Code of Zoological Nomenclature, a new name and its author are not separated by any punctuation mark, while the name of a taxon and that of a subsequent user are separated by a punctuation mark other than a comma, in this catalog by a colon. Abbreviations used in annotations and their meaning are given in Table 2. The letters a, b, etc. appearing after dates are used to distinguish among papers by the same author in one year.

The following are placed as new combinations: Rhoecus australasiae (Westwood, 1837); Candace intermedia (Schouteden, 1905); and Candace virescens (Distant, 1903).

The type species is given for each genus and the means of designation. In one instance a type species appears not to have been designated; we leave this act to the first reviser.

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The nominal date of publication has been accepted as correct in the absence of evidence to the contrary of which we are aware. Unless priority is involved, and we know of no unresolved priority problem in this family, we considered researching publication dates to be unrewarding.

The known distribution of each species is given, using current political units in most cases. Sometimes a physiographic unit - an island or mountain or desert - is a better boundary or the only possible one because of imprecise records.

The catalog is preserved on disk in DOS format in order that it may be corrected or updated with minimal effort. Disks are conserved in the American Museum of Natural History and the California Academy of Sciences.

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TABLE 1. ARRANGEMENT OF CATALOG

TESSARATOMIDAE

NATALICOLINAE

Cyclogastridea Elizabetha Empysarus
Encosternum Haplosterna Natalicola Phyllocoris
Selenyenum

ONCOMERINAE

Agapophyta Cumare Erga Garceus
Lynamorpha Musgraveia Neosalica Oncomeris
Peltocopta Piezosternum Plisthenes Rhoecus
Stilida Tamolia

TESSARATOMINAE

PRIONOGASTRINI

Prionogaster

SEPININI

PLATYTATARIA

Platyatus

SEPINARIA

Ipamu Malgassus Rhynchotrnetus Sepina

TESSARATOMINI

EUSTHENARIA

Anacanthopus Asiarcha Aurungabada
Candace Carpona Dalcantha Eurostus Euryleura
Eusthenes Eusthenimorpha Mattiphus
Megaedoeum Origanus Pseudopycanum
Pycanum Sanganus Serocarpona

TESSARATOMARIA

Acidosterna Amissus Embolosterna Enada
Hypencha Mucanum Pygoplatys Siphnus
Tessaratoma

INCERTAE SEDIS

NOTOPOMINI

Notopomus

TABLE 2. ABBREVIATIONS USED IN ANNOTATIONS

B = biology
C = chromosomes
D = description or diagnosis
Dn = descriptive note
G = genetics
Ge = genitalia
Gp? = uncertain genetic position
H = host (s)
I = immatures
K = keyed
Kg = genera keyed
Ksg = subgenera keyed
Ks = species keyed
Kss = subspecies keyed
Kt = tribes keyed
L = listed
M = morphology
N = nomenclature
Nn = new name
P = parasite (s), predator (s)
R = record or distribution
S = synonymy
sg = scent gland
sgf = scent gland fluid
syn = synonymized
sec = on the authority of
T = type material
Ts = taxonomic status or position
Ts? = uncertain taxonomic status or position
Tsp = type species

TESSARATOMIDAE

Stål, 1865a

Type genus: *Tessaratoma* Lepeletier & Serville, 1825

- 1865 *Tessaratomida* Stål, Hem. Afr. 1:33, 223-226. (K, Kg)
 1870 *Tessaratomina*: Stål, Sv. Vet. Akad. Handl. 9(1):60. (K to sections; as subfamily of Pentatomidae)
 1871 *Tessaratomina*: Stål, Öfv. Vet. Akad. Förh. 27(7):642. (L; as subfamily of Pentatomidae)
 1881 *Tessaratomidae*: Distant, Biol. Cent. Am. Rh. 1:101. (R)
 1889 *Tessaratomina*: Atkinson, J. Asiatic Soc. Bengal 58 (pt.2):52. (D)
 1891 *Eustheninae* Bergroth, Rev. Ent. 10:213. (Nn for *Tessaratominae*)
 1893 *Tessaratomidae*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)
 1900 *Tessaratomina*: Horváth, Term. Füzet. 23:339-340. (K to divisions; as subfamily)
 1902 *Tessaratominae*: Distant, Fauna Brit. India, Rh. 1:2, 256. (K, D)
 1903 *Tessaratominae*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(1):2. (K)

- 1905 *Tessaratominae*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):209. (S, D, Kt.)
 1906 *Tessaratomina*: Oshanin, Verz. Pal. Hem. 1:163. (S; as subfamily of Pentatomidae)
 1909 *Tessaratominae*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 67. (*Delocephalus* removed)
 1909 *Tessaratominae*: Kirkaldy, Cat. Hem. 1:343-344, 363. (table of gen.; S, K)
 1922 *Tessaratominae*: Courteaux, Anim. Art. 1:272. (D)
 1933 *Tessaratominae*: China, Ann. Mag. Nat. Hist. (10)12:193. (phylogeny)
 1934 *Tessaratominae*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):51. (K)
 1935 *Tessaratominae*: Tang, Cat. Ins. Sin. 2:362. (S)
 1935 *Tessaratominae*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):104-105. (S, D, Kg of China)
 1937 *Tessaratominae*: Beier, Handb. Zool. 4(2) Ins. 2:2185, 2186. (K, D, tribes)
 1939 *Tessaratominae*: Torre-Bueno, Ent. Am. 19(3):196. (K)
 1940 *Tessaratominae*: Costa-Lima, Ins. Bras. :44. (K)
 1949 *Tessaratominae*: Vidal, Mem. Soc. Sci. Nat. Maroc. 48:53. (K)
 1951 *Tessaratominae*: Poisson, Traité Zool. 10(2): 1794. (Dn)
 1952 *Tessaratominae*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):234, 288. (K)
 1952a *Tessaratominae*: Villiers, Init. Afr. 9:52, 82. (K, D)
 1955 *Tessaratominae*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (Kt)
 1955 *Tessaratominae*: China & Miller, Ann. Mag. Nat. Hist. (12)8:258. (check-list)
 1956 *Tessaratominae*: Miller, Biol. Het. ed. 1:49, 50. (E, Dn)
 1957 *Tessaratominae*: Zia, Acta Ent. Sin. 7:423-448. (Chinese genn. & spp.)
 1959 *Tessaratominae*: China & Miller, Bull. Brit. Mus. (N.H.) Ent. Ser. 8(1):5, 38. (K)
 1962 *Tessaratominae*: Yang, Econ. Ins. Fauna China 2:40. (Ks)
 1962 *Tessaratomidae*: Kumar, Ent. Tidskr. 83(1-2):60-61. (classification)
 1966 *Tessaratomidae*: McDonald, Quaes. Ent. 2:45, 59. (Ge)
 1969 *Tessaratomidae*: Kumar, Aust. J. Zool. 17:604. (classification)
 1970 *Tessaratomidae*: Woodward et al., Hem. Austral. :449, 450. (K)
 1971 *Tessaratominae*: Miller, Biol. Het. :58. (D)
 1972 *Tessaratominae* (sic): Jordan, Handb. Zool. 4(2)2/ 20:38-39. (K, D)
 1975 *Tessaratomidae*: Gross, Hem. S. Australia, pt. 1:76, 78. (K)
 1975 *Tessaratomidae*: Stys & Kerzhner, Acta. Ent. Bohemoslovaca 72(2):74. (classification)
 1977 *Tessaratominae*: Hsiao et al., Handb. Chinese Hem.-Het. 1:53, 63-64. (K, Kg)
 1979 *Tessaratominae*: Rolston & McDonald, J. N.Y. Ent. Soc. 87(3):189, 190, 204. (K, Dn)
 1980 *Tessaratomidae*: Ahmad, Proc. 1st. Pakistan Congr. Zool. :121, 134-135. (taxa of Pakistan & Azad Kashmir)
 1981 *Tessaratomidae*: Froeschner, Smithsonian. Contr. Zool. 322:95. (Ts)
 1981 *Tessaratomidae*: Ahmad, Ent. Soc. Karachi Suppl. 4(1)(1979):84. (classification)
 1981 *Tessaratomidae*: Hinton, Biol. Ins. Eggs. 1:593-594. (E)
 1982 *Tessaratomidae*: Zheng & Zou, Zool. Res. 3 Suppl. :113. (concurrs with removal of genus *Vitruvius*)

- 1982 Tessaratomidae: Slater, Syn. Class.:445. (D)
 1982 Tessaratomidae: Nuamah, Insect Sci. Application 3(1):14, 15, 21, 25. (C; classification)
 1986 Tessaratomidae: Jacobs, Ins. S. Africa.:142, 144. (K, D)
 1987 Tessaratomidae: Schaefer & Ahmad, Phytophaga 1:22, 27. (H)
 1988 Tessaratomidae: Froeschner, Cat. Het.:694. (Ts)
 1989 Tessaratomidae: Delvare & Alberlenc, Ins. Afr. Am. Trop.:114. (K)

NATALICOLINAE

Stål, 1870a

Type genus: *Natalicola* Spinola, 1850

- 1870 Cyclogastrina Stål, Sv. Vet. Akad. Handl. 9(1):60. (K as section)
 1900 Natalicolaria Horváth, Term. Füzet. 23:339. (K, S)
 1905 Natalicolaria: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):210, 240. (K, S, Kg)
 1909 Aplosternini Kirkaldy, Cat. Hem. 1:358. (Nn for Natalicolaria)
 1937 Aplosternini: Beier, Handb. Zool. 4(2) Ins. 2:2186.
 1969 Natalicolinae: Kumar, Ann. Ent. Soc. Am. 62(4):687-689. (M, anatomy)
 1974 Natalicolinae: Kumar, J. Nat. Hist. 8(6):675-676. (Kg)

Aplosterna Westwood, 1837 — see *Haplosterna*.

Aplosterna delegorguei (Spinola, 1850) — see *Encosternum delegorguei*.

Aplosterna virescens Westwood, 1837 — see *Haplosterna virescens*.

Cyclogaster Westwood, 1838 — see *Natalicola*.

Cyclogaster subgenus *Liphaemus* Stål, 1872 — see *Haplosterna*.

Cyclogaster delegorguei (Spinola, 1850) — see *Natalicola pallidus*.
Cyclogaster exsanguis Stål, 1872 — see *Haplosterna virescens*.
Cyclogaster pallidus Westwood, 1838 — see *Natalicola pallidus*.
Cyclogaster vassci Courteaux, 1907 — see *Elizabetha vassci*.

Cyclogastridea Reuter, 1884

Type species: *Cyclogastridea nigromarginalis* Reuter, 1884, by monotypy.

- 1884 *Cyclogastridea* Reuter, Öfv. Finska Vet.-Soc. Förh. 25(1882-1883):9-10.
 1893 *Cyclogastridea*: Lethierry & Severin, Cat. Gen. Hem. 1:234. (S)
 1905 *Cyclogastridea*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240, 244. (K, S, D)
 1909 *Cyclogastridea*: Kirkaldy, Cat. Hem. 1:359. (S)
 1974 *Cyclogastridea*: (sic) Kumar, J. Nat. Hist. 8(6):676 (K)

Cyclogastridea equatoria Distant, 1890 — see *Haplosterna virescens*

Cyclogastridea nigromarginalis Reuter, 1884

- 1884 *Cyclogastridea nigromarginalis* Reuter, Öfv. Finska Vet.-Soc. Förh. 25(1882-1883):10.
 1893 *Cyclogastridea nigromarginalis*: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)

- 1894 *Cyclogastridea nigromarginalis*: Haglund, Öfv. Vet. Akad. Förh. 51(8):406-407. (D,R)
 1904a *Cyclogastridea nigromarginalis*: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:160. (R)
 1905 *Cyclogastridea nigromarginalis*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):245-246, 275, figs. 114-115, pl. 5 fig. 10. (S, D, R, I)
 1909 *Cyclogastridea nigromarginalis*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 69. (R)
 1909 *Cyclogastridea nigromarginalis*: Kirkaldy, Cat. Hem. 1:359. (S)
 1921 *Cyclogastridea nigromarginalis*: Lehmann, Arch. Naturges. Berlin. 87A(6):39.
 1922 *Cyclogastridea nigromarginalis*: Courteaux, Anim. Art. 1:272, pl. 1, fig. 5. (R)
 1949 *Cyclogastridea nigromarginalis*: Villiers, I.F.A.N. Catalogues 5:89. (R)
 1952b *Cyclogastridea nigromarginalis*?: Villiers, Mem. I.F.A.N. 19:307. (R)
 1964 *Cyclogastridea nigromarginalis*: Schouteden, Rev. Zool. Bot. Afr. 70(1-2):95. (R)
 1969 *Cyclogastridea nigromarginalis*: Kumar, Ann. Ent. Soc. Am. 62(4):681-692, 684-687, fig. 1-4, 16A, 16B, 17, 19-23. (M, E, N, H)
 1974 *Cyclogastridea nigromarginalis*: Kumar, J. Nat. Hist. 8(6):fig. 4A. (antenna)
 1980 *Cyclogastridea nigromarginalis*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982 *Cyclogaster* (sic) *nigromarginalis*: Linnavuori, Acta Zool. Fenn. 163:11-12. (R)

Distribution: Cameroon, Ghana, Guinea, Ivory Coast, Kenya, Nigeria, Zaire.

Elizabetha Schouteden, 1916

Type species not fixed: *Cyclogaster vassei* Courteaux, 1907, and *Elizabetha courteaui* Schouteden, 1916, are eligible as the type species.

Schouteden (1916) apparently intended the latter as type species:

- 1916 *Elizabetha* Schouteden, Rev. Zool. Afr. 4:278.
 1974 *Elizabetha*: Kumar, J. Nat. Hist. 8(6):676. (K)

Elizabetha courteaui Schouteden, 1916

- 1916 *Elizabetha courteaui* Schouteden, Rev. Zool. Afr. 4:279.
 1954 *Elizabetha courteaui*: Leston, Publ. Cult. Comp. Diam. Angola 24:14-15, figs. 4-11. (D, R)
 1980 *Elizabetha courteaui*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Angola, Zaire.

Elizabetha kisantu Schouteden, 1957

- 1957 *Elizabetha kisantu* Schouteden, Rev. Zool. Bot. Afr. 55(3-4):416-417.

Distribution: Zaire.

Elizabetha vassei (Courteaux, 1907)

- 1907 *Cyclogaster vassei* Courteaux, Bull. Mus. Paris 1907:36-37.
 1909 *Natalicola vassei*: Kirkaldy, Cat. Hem. 1:371. (L)
 1916 *Elizabetha vassei*: Schouteden, Rev. Zool. Afr. 4:279 (Ts)

Distribution: Mozambique.

Empysarus Martin, 1904

Type species: Empysarus: Empysarus depressus Martin, 1904, by monotypy.

Mussafira: Mussafira johni Oshanin, 1907, by monotypy.

- 1904 Empysarus Martin, Bull. Mus. Paris. 10:315-316.
 1907 Mussafira Oshanin, Ann. Mus. Zool. St. Petersb. 12:414-416. (syn. by Bergroth, 1908)
 1908 Empysarus: Bergroth, Mem. Soc. Ent. Belg. 15:187. (S)
 1908 Empysarus: Distant, Faun. Brit. India, Rh. 4(2):459-460.
 1909 Empysarus: Kirkaldy, Cat. Hem. 1:357. (S)
 1970 Empysarus: Kumar & Ghauri, Dt. Ent. Z. 17(1-3):15-16. (classification)
 1974 Empysarus: Kumar, J. Nat. Hist. 8(6):676. (K)

Empysarus depressus Martin, 1904

- 1904 Empysarus depressus Martin, Bull. Mus. Paris. 10:316.
 1907 Mussafira johni Oshanin, Ann. Mus. Zool. St. Petersb. 12:416-417. (syn. by Bergroth, 1908)
 1908 Empysarus depressus: Bergroth, Mem. Soc. Ent. Belg. 15:187. (S)
 1908 Empysarus (sic) depressus: Distant, Faun. Brit. India, Rh. 4(2):460, fig. 271.
 1908 Empysarus (sic) johni: Distant, Faun. Brit. India, Rh. 4(2):460-461, fig. 272. (D after Oshanin)
 1909 Empysarus depressus: Kirkaldy, Cat. Hem. 1:357. (S)
 1985 Empysarus johni: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:21-22, fig. 52. (Dn, R)

Distribution: Southern India, Sri Lanka.

Empysarus johni (Oshanin, 1907) — see Empysarus depressus

Empysurus Martin, 1904 — misspelling, see Empysarus

Encosternum Spinola, 1850

Type species: Encosternum: Encosternum delegorguei Spinola, 1850, by original designation.

Lamus: Lamus dallasi Stål, 1853 [= Encosternum delegorguei Spinola, 1850] by monotypy.

Malabama: Malabama aethiops Distant, 1898, by monotypy.

- 1850 Encosternum Spinola, Gen. Ins. Artr. :32, 67-69. (K)
 1852 Encosternum: Spinola, Mem. Soc. Ital. Modena 25(1):72, 107-109. (reprint of 1850 paper)
 1853 Lamus Stål, Öfv. Vet. Akad. Förh. 10(9):222. (syn. with Aplosterna Westwood, 1837, & Encosternum Spinola, 1850, by Stål, 1865)
 1865 Halposterna: Stål, Hem. Afr. 1:226, 232. (K, D)
 (emendation of Aplosterna Westwood, 1837; misdet.)
 1870 Halposterna: Stål, Sv. Vet. Akad. Handl. 9(1):78. (part)
 1893 Halposterna: Lethierry & Severin, Cat. Gen. Hem. 1:234. (part)
 1894 Encosternum: Montandon, Ann. Soc. Ent. Belg. 38(1893):643-644. (Aplosternum Westwood, 1837, not synonym)
 1898 Malabama Distant, Ann. Mag. Nat. Hist. (7)2:309. (syn. by Kumar, 1974)
 1905 Encosternum: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240, 252. (K, S, D)
 1905 Malabama: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240, 254. (K, D)

- 1908 Malabama: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 Encosternum: Kirkaldy, Cat. Hem. 1:359. (S)
 1909 Malabama: Kirkaldy, Cat. Hem. 1:360. (S)
 1972 Engosternum (sic): Jordan, Handb. Zool. 4(2)2/20:39. (L)
 1974 Encosternum: Kumar, J. Nat. Hist. 8(6):675, 676. (S, K)
 1980 Encosternum: Medler, Mem. Am. Ent. Inst., no. 30:120. (S)

Encosternum aethiops (Distant)

- 1898 Malabama aethiops Distant, Ann. Mag. Nat. Hist. (7)2:309.
 1905 Malabama aethiops: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):254-255. (quotes original description)
 1908 Malabama aethiops: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 Malabama aethiops: Kirkaldy, Cat. Hem. 1:360. (S)
 1980 Encosternum aethiops: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Ghana, Zimbabwe.

Note: Kumar, 1974, did not indicate the taxonomic status of Malabama aethiops when synonymizing Malabama Distant, 1898, with Encosternum Spinola, 1850.

Encosternum delegorguei Spinola, 1850

- 1850 Encosternum delegorguei Spinola, Gen. Ins. Artr. :69.
 1852 Encosternum delegorguei: Spinola, Mem. Soc. Ital. Modena 25(1):109. (reprint of 1850 paper)
 1853 Lamus dallasi Stål, Öfv. Vet. Akad. Förh. 10(9):222. (syn. by Stål, 1865)
 1865 Haplosterna delegorguei: Stål, Hem. Afr. 1:232. (D, S)
 1870 Haplosterna delegorguei: Stål, Sv. Vet. Akad. Handl. 9(1):78. (S)
 1873 Aplosterna delegorguei: Walker, Cat. Het. Suppl. :27. (S)
 1893 Haplosterna delegorguei: Lethierry & Severin, Cat. Gen. Hem. 1:234. (S)
 1894 Encosternum delegorguei: Montandon, Ann. Soc. Ent. Belg. 38(1893):644-645. (D, S)
 1905 Encosternum delegorguei: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):252-254, figs. 120, 121, pl. 5 fig. 7. (S, D, R)
 1909 Encosternum delegorguei: Kirkaldy, Cat. Hem. 1:359. (S)
 1913 Encosternum delegorguei: Schumacher, Denkschr. Med. Ges. 17:60. (R)
 1921 Encosternum delegorguei: Lehmann, Arch. Naturges. Berlin. 87A(6):39. (R)
 1945 Encosternum delegorguei: Biôte, Zool. Meded. 25:308. (R)
 1951 Encosternum (sic) delagorguei (sic): Poisson, Traité Zool. 10(2):1793. (as human food)
 1952 Encosternum delegorguei: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
 1956 Encosternum delagorguei (sic): Miller, Biol. Het. ed. 1:38, 47. (human food)
 1969a Encosternum delegorguei: Kumar, Ann. Ent. Soc. Am. 62(4):684, figs. 8, 9, 13. (M)
 1971 Encosternum delagorguei (sic): Miller, Biol. Het. :55. (as human food)
 1986 Encosternum delegorguei: Jacobs, Ins. S. Africa, fig. 16.90. (fig. only)

Distribution: Gambia, Namibia, South Africa, Zimbabwe.

Engosternum Spinola, 1850 — see Encosternum

Gonielytrum Stål, 1853 — see **Natalicola**

Gonielytrum circuliventre Stål, 1853 — see **Natalicola pallidus**

Haplosterna Westwood, 1837

Type species: **Aplosterna virescens** Westwood, 1837, by monotypy.

Cyclogaster (**Liphaemus**): **Cyclogaster exsanguis** Stål, 1872 [= **Aplosterna virescens** Westwood, 1837], by monotypy.

- 1837 **Aplosterna** Westwood, Cat. Hope 1:26-27.
 1846 **Aplosterna**: Agassiz, Nomen. Zool. Hem.:2. (Ety)
 1851 **Aplosterna**: Dallas, List. Hem. 1:317, 337. (K)
 1865 **Haplosterna**: Stål, Hem. Afr. 1:226, 232. (misdet., see **Encosternum**)
 1870 **Haplosterna**: Stål, Sv. Vet. Akad. Handl. 9(1):78. (part)
 1872 **Cyclogaster** (**Liphaemus**) Stål, Sv. Vet. Akad. Handl. 10(4):130. (n. subgen.; syn. by Schouteden, 1905)
 1893 **Haplosterna**: Lethierry & Severin, Cat. Gen. Hem. 1:234. (part; see also **Encosternum**)
 1894 **Aplosterna**: Montandon, Ann. Soc. Ent. Belg. 38(1893):643-644. (cf. **Encosternum**; orthography)
 1894 **Liphaemus**: Montandon, Ann. Soc. Ent. Belg. 38(1893):645. (D)
 1905 **Haplosterna** (sic): Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240. (K)
 1905 **Haplosterna**: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):246-247. (S, D)
 1909 **Aplosterna**: Kirkaldy, Cat. Hem. 1:359. (S)
 1974 **Aplosterna**: Kumar, J. Nat. Hist. 8(6):676. (K)
 1975 **Haplosterna**: Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:8. (L)
 1980 **Aplosterna**: Medler, Mem. Am. Ent. Inst., no. 30:120. (S)

Haplosterna delegorguei (Spinola, 1850) — see **Encosternum delegorguei**

Haplosterna distincta Schouteden, 1909

- 1909 **Haplosterna distincta** Schouteden, Ann. Mus. Congo Belge Zool. (3)2, 1:1:70. (T)

Distribution: Tanzania.

Haplosterna virescens Westwood, 1837

- 1837 **Aplosterna virescens** Westwood, Cat. Hope 1:27.
 1851 **Aplosterna virescens**: Dallas, List. Hem. 1:338. (R)
 1859 **Aplosterna virescens**: Dohrn, Cat. Hem. 120. (L)
 1862 **Aplosterna virescens**: Schaum, Peter's Reise nach Mossambique 2:40. (R)
 1868 **Aplosterna virescens**: Walker, Cat. Het. 3:457. (R)
 1870 **Haplosterna virescens**: Stål, Sv. Vet. Akad. Handl. 9(1):78. (S)
 1872 **Cyclogaster** (**Liphaemus**) **exsanguis** Stål, Sv. Vet. Akad. Handl. 10(4):130. (syn. by Schouteden, 1905)
 1890 **Cyclogastridea equatoria** Distant, Ann. Soc. Ent. Belg., 34 c.r. (ser. 4)(5):57-58. (syn. by Schouteden, 1905)
 1893 **Natalicola exsanguis**: Lethierry & Severin, Cat. Gen. Hem. 1:233. (L)
 1893 **Cyclogastridea equatoria**: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)
 1893 **Haplosterna virescens**: Lethierry & Severin, Cat. Gen. Hem. 1:234. (S)
 1894 **Liphaemus equatoria**: Montandon, Ann. Soc. Ent. Belg. 38(1893):645. (Gp)
 1894 **Liphaemus exsanguis**: Montandon, Ann. Soc. Ent. Belg. 38(1893):645. (Dn, T)

1901 **Aplosterna virescens**: Distant, Proc. Zool. Soc. Lond. 1900 (4):819. (Ts)

1905 **Haplosterna virescens**: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):247-248, figs. 116, 117. (S, D, R)

1909 **Haplosterna virescens**: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1):70. (T)

1909 **Aplosterna virescens**: Kirkaldy, Cat. Hem. 1:359. (S)

1913 **Aplosterna virescens**: Schouteden, Rev. Zool. Afr. 2(2):197. (R)

1945 **Aplosterna virescens**: Blöte, Zool. Meded. 25:308. (R)

1952 **Aplosterna virescens**: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)

1969a **Aplosterna virescens**: Kumar, Ann. Ent. Soc. Am. 62(4):684, figs. 10, 11, 15. (M)

1969 **Aplosterna virescens**: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(37):10. (T)

1980 **Aplosterna virescens**: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Congo, Gambia, Ghana, Mozambique, Senegal, Sierra Leone, Zaire, Zimbabwe.

Haplosterna virescens virescens Westwood, 1837

1837 **Aplosterna virescens** Westwood, Cat. Hope 1:27.

1975 **Haplosterna virescens virescens**: Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:9-10, figs. 1a-h. (D, R)

Distribution: Gambia, Kenya, Zaire.

Haplosterna virescens combreticola Linnavuori, 1975

1975 **Haplosterna virescens combreticola** Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:9-10, figs. 1i-m.

1982a **Haplosterna virescens combreticola**: Linnavuori, Acta Zool. Fenn. 163:12. (R)

Distribution: Nigeria, Sudan.

Haplosterna virescens senegalana Linnavuori, 1975

1975 **Haplosterna virescens senegalana** Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:10, figs. 1b; 2a-d.

Distribution: Senegal

Haplosterna Westwood, 1837 - misspelling of **Haplosterna**

Lamus Stål, 1953 — see **Encosternum**

Lamus dallasi Stål, 1953 — see **Encosternum delegorguei**

Liphaemus Stål, 1972 — see **Haplosterna**

Liphaemus equatoria (Distant, 1890) — see **Haplosterna virescens**

Malabama Distant, 1898 — see **Encosternum**

Malabama aethiops Distant, 1898 — see **Encosternum aethiops**

Mussafira Oshanin, 1907 — see **Empysarus**

Mussafira johnei Oshanin, 1907 — **Empysarus depressus**

Natalicola Spinola, 1850

Type species: **Cyclogaster**: **Cyclogaster pallidus** Westwood, 1837, by original designation.

Natalicola: **Natalicola delegorguei** Spinola, 1850

[= **Cyclogaster pallidus** Westwood, 1837] by monotypy.

Gonielytrum: **Gonielytrum circuliventre** Stål, 1853

[= **Cyclogaster pallidus** Westwood, 1837] by monotypy.

- 1837 *Cyclogaster* Westwood, Trans. Ent. Soc. Lond. 2:20-21. (preoccup. Gronovius, 1760)
 1846 *Cyclogaster*: Agassiz, Nomen. Zool. Hem.:6. (Ety)
 1850 *Natalicola* Spinola, Gen. Ins. Artr.:70. (syn. with *Cyclogaster* Westwood by Stål, 1870)
 1851 *Cyclogaster*: Dallas, List. Hem. 1:318, 346. (K)
 1852 *Natalicola*: Spinola, Mem. Soc. Ital. Modena 25(1):110. (reprint 1850 paper)
 1853 *Gonielytrum* Stål, Öfv. Vet. Akad. Förh. 10(9):223. (syn. with *Cyclogaster* Westwood by Stål, 1870)
 1865 *Cyclogaster*: Stål, Hem. Afr. 1:226, 233. (K, D, S)
 1870 *Cyclogaster*: Stål, Sv. Vet. Akad. Handl. 9(1):77. (S)
 1891 *Natalicola*: Bergroth, Rev. Ent. 10:214. (valid name for *Cyclogaster* Westwood, 1837)
 1893 *Natalicola*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1905 *Natalicola*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):240-241. (K, S, D)
 1909 *Natalicola*: Kirkaldy, Cat. Hem. 1:358. (S)
 1925 *Natalicola*: Hesse, Ann. S. Afr. Mus. 23(1):40. (S)
 1974 *Natalicola*: Kumar, J. Nat. Hist. 8(6):676. (K)

Natalicola delegorguei Spinola, 1850 — see *Natalicola pallidus*

Natalicola exsanguis Stål, 1872 — see *Haplosterna virescens*

Natalicola pallidus (Westwood, 1837)

- 1837 *Cyclogaster pallidus* Westwood, Trans. Ent. Soc. Lond. 2:21, pl. 2, fig. 6.
 1850 *Natalicola delegorguei* Spinola, Gen. Ins. Artr.:70. (syn. with *Cyclogaster pallidus* Westwood, by Stål, 1870)
 1865, concurrence by Schouteden, 1909)
 1851 *Cyclogaster pallidus*: Dallas, List. Hem. 1:346. (R)
 1852 *Natalicola delegorguei*: Spinola, Mem. Soc. Ital. Modena 25(1):110. (reprint of 1850 paper)
 1853 *Gonielytrum circuliventre* Stål, Öfv. Vet. Akad. Förh. 10(9):223. (syn. by Stål, 1865)
 1859 *Cyclogaster pallidus*: Dohrn, Cat. Hem.:21. (L)
 1865 *Cyclogaster pallidus*: Stål, Hem. Afr. 1:233. (D, S)
 1868 *Cyclogaster pallidus*: Walker, Cat. Het. 3:474. (R)
 1870 *Cyclogaster pallidus*: Stål, Sv. Vet. Akad. Handl. 9(1):77. (S, R)
 1877 *Cyclogaster delegorguei*: Distant, Ent. Mo. Mag. 14(159):133. (S, Dn, T, R)
 1893 *Natalicola delegorguei*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1893 *Natalicola pallidus*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1894 *Natalicola delegorguei*: Montandon, Ann. Soc. Ent. Belg. 38(1893):643. (cf. *Natalicola pallidus*)
 1898 *Natalicola pallida*: Distant, Ann. Mag. Nat. Hist. (7)2:302, 309, 315. (R)
 1905 *Natalicola delegorguei*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):241-243, figs. 112, 113, pl. 5 fig. 5. (K, S, D, R)
 1909 *Natalicola pallidus*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 69. (T, S, R)
 1909 *Natalicola delegorguei*: Kirkaldy, Cat. Hem. 1:359. (S)
 1909 *Natalicola pallidus*: Kirkaldy, Cat. Hem. 1:359. (S)
 1910a *Natalicola delegorguei*: Schouteden, Sjöstedt's Kilim. Meru Exp. 12(6):92. (R)
 1913 *Natalicola delegorguei*: Jeannel, Voy. Alluaud Hem. 1:109. (S, R)
 1913 *Natalicola delegorguei*: Schouteden, Rev. Zool. Afr. 2(2):197. (R)
 1925 *Natalicola pallidus*: Hesse, Ann. S. Afr. Mus. 23(1):40. (S, R)
 1935 *Natalicola delegorguei*: Hesse, Ann. Transv. Mus.

16(4):589. (R, S)

- 1945 *Natalicola delegorguei*: Blöte, Zool. Meded. 25:308. (R)
 1952 *Natalicola delegorguei*: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
 1956 *Natalicola delegorguei* (sic): Mancini, Fragm. Ent. 2(8):95. (R)
 1969a *Natalicola delegorguei*: Kumar, Ann. Ent. Soc. Am. 62(4):683-684, figs. 5-7. (M)
 1980a *Natalicola delegorguei*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1980 *Natalicola pallidus*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982a *Natalicola pallidus*: Linnavuori, Acta Zool. Fenn. 163:11. (R)
Distribution: Congo, Ethiopia, Gabon, Gambia, Guinea, Kalahari, Kilimanjaro, Malawi, Mozambique, Namibia, Nigeria, South Africa, Tanzania, Togo, Zaire, Zambia, Zimbabwe.

Natalicola vassci (Courteaux, 1907) - see *Elisabetha vassci*

Phyllocoris Jeannel, 1913

Type species: *Phyllocoris acutus* Jeannel, 1913, by original designation.

- 1913 *Phyllocoris* Jeannel, Voy. Alluaud Hem. 1:109-110.
 1974 *Phyllocoris*: Kumar, J. Nat. Hist. 8(6):676. (K)

Phyllocoris acutus Jeannel, 1913

- 1913 *Phyllocoris acutus* Jeannel, Voy. Alluaud Hem. 1:110-111, pl. 4 figs. 39, 41.
 1954 *Phyllocoris acuta* (sic): Leston, Publ. Cult. Comp. Diam. Angola 24:15-16, figs 12-14. (Dn, R)
Distribution: Angola, Kenya, Kilimanjaro.

Phyllocoris jeanneli Schouteden, 1957

- 1957 *Phyllocoris jeanneli* Schouteden, Rev. Zool. Bot. Afr. 55(3-4):415-416.
Distribution: Zaire.

Selenyenum Montandon, 1894

Type species: *Selenyenum piriforme* Montandon, 1894, designated by Schouteden, 1905 (spelled *pyriforme*)

- 1894 *Selenyenum* Montandon, Ann. Soc. Ent. Belg. 38(1893):645-647.
 1905 *Selenyenum*: Schouteden, Ann. Mus. Congo Zool. ser. 3, 1(2):240, 249. (K, D)
 1907 *Selenyenum*: Oshanin, Ann. Mus. Zool. St. Petersburg. 12:416. (cf. *Mussafira*)
 1908 *Selenyenum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Selenyenum*: Kirkaldy, Cat. Hem. 1:XXXVI, 359. (Tsp, S)
 1974 *Selenyenum*: Kumar, J. Nat. Hist. 8(6):676. (K)

Selenyenum contractum Montandon, 1894

- 1894 *Selenyenum contractum* Montandon, Ann. Soc. Ent. Belg. 38(1893):648.
 1901 *Selenyenum contractum*: Distant, Ann. Soc. Ent. Belg. 45(1):28. (R)
 1905 *Selenyenum contractum*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):251-252, fig. 119. (D)
 1908 *Selenyenum contractum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)

- 1909 *Selenyenum contractum*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 70. (T, R)
 1909 *Selenyenum contractum*: Kirkaldy, Cat. Hem. 1:359. (S)
 1969 *Selenyenum contractum*: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(37):6-7. (T)
 1980 *Selenyenum contractum*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Congo, Sierra Leone, Zaire.

Selenyenum piriforme Montandon, 1894

- 1894 *Selenyenum piriforme* Montandon, Ann. Soc. Ent. Belg. 38(1893):647-648.
 1905 *Selenyenum pyriforme* (sic): Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):249-251, fig. 118. (D, R)
 1908 *Selenyenum piriforme*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Selenyenum pyriforme* (sic): Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 70. (T, R, S)
 1909 *Selenyenum piriforme*: Kirkaldy, Cat. Hem. 1:359. (S)
 1935 *Selenyenum? pyriforme* (sic): Hesse, Ann. Transv. Mus. 16(4):589. (R)
 1969a *Selenyenum piriforme*: Kumar, Ann. Ent. Soc. Am. 62(4):684, figs. 14, 18. (M)
 1980 *Selenyenum piriforme*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Kalahari, Sierra Leone, W. Africa, Zaire.

ONCOMERINAE

Stål, 1870

Type genus: Oncomerinae: *Oncomeris* Laporte, 1832

Piezosternaria: *Piezosternum* Amyot & Serville, 1843

- 1870 Oncomerina Stål, Sv. Vet. Akad. Handl. 9(1):60. (K as section)
 1889 Oncomeraria: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):82. (L as division)
 1900a Oncomeraria: Horváth, Term. Füzet. 23:339, 340-341. (K, Kg)
 1905 Oncomeraria: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):209, 214. (K)
 1935 Oncomerini: Tang, Cat. Ins. Sin. 2:362. (L)
 1937 Oncomerini: Beier, Handb. Zool. 4(2) Ins. 2:2186. (D)
 1955 Oncomerini: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62, 63-64. (K, Kg)
 1955 Piezosternaria Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63. (syn. by Kumar, 1969)
 1955 Oncomeraria: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63. (D)
 1969 Oncomerinae: Kumar, Aust. J. Zool. 17:601-604. (M)

ONCOMERINI Stål, 1870 - see ONCOMERINAE

Agapophyta Guérin-Meneville, 1831

Type species: *Agapophyta bipunctata* Guérin-Meneville, 1831a, by monotypy.

- 1831 *Agapophyta* Guérin-Meneville, Voy. Coq. Ins. pl. 11 fig. 15. (*Agapophyta bipunctata* figured)
 1833 *Agapophyta*: Laporte, Mag. Zool. (Guérin), 2:55, 63. (K, D)
 1835 *Agapophyta*: Boisduval, Voy. Astrolabe Ent. 2:626-627. (Dn)

- 1835 *Agapophyta*: Burmeister, Handb. Ent. 2:347, 353. (K, D)
 1838 *Agapophyta*: Guérin-Meneville, Voy. Coq. Ins. 2(2):168. (D)
 1840 *Agapophyta*: Blanchard, Hist. Nat. Ins. 3:143. (D)
 1843 *Agapophyta*: Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 162-163. (K, D)
 1846 *Agapophyta*: Agassiz, Nomen. Zool. Hem.:1. (Ety)
 1851 *Agapophyta*: Herrich-Schäffer, Wanz. Ins. 9:284. (K)
 1865 *Agapophyta*: Stål, Hem. Afr. 1:224. (K)
 1868 *Agapophyta*: Vollenhoven, Faune Ent. Indo-Neerl. 3:20. (D)
 1868 *Agapophyta*: Walker, Cat. Het. 3:470. (S)
 1870 *Agapophyta*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S)
 1893 *Agapophyta*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1909 *Agapophyta*: Kirkaldy, Cat. Hem. 1:XXXV, 346. (Tsp, S)
 1945 *Agapophyta*: Blöte, Zool. Meded. 25:286-287. (Ks)
 1952 *Agapophyta*: Dupuis, Bull. Soc. Zool. Fr. 77:452. (N)
 1955 *Agapophyta*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
 1957 *Agapophyta*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442.
 1972 *Agapophyta*: Jordan, Handb. Zool. 4(2)2/20:39. (L)

Agapophyta astridae Schouteden, 1933

- 1933 *Agapophyta astridae* Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51-52.
 1969 *Agapophyta astridae*: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(37):4. (T)

Distribution: Sumatra.

Agapophyta aurantiaca Blöte, 1945

- 1945 *Agapophyta aurantiaca* Blöte, Zool. Meded. 25:287, fig. 2a. (K)

Distribution: Solomons (Kei I.)

Agapophyta bipunctata Guérin-Meneville, 1831

- 1831 *Agapophyta bipunctata* Guérin-Meneville, Voy. Coq. Ins. pl. 11 fig. 15. (no text)
 1833 *Agapophyta bipunctata*: Laporte, Mag. Zool. (Guérin-Meneville), 2:63, pl. 54, fig. 9.
 1835 *Agapophyta bipunctata*: Boisduval, Voy. Astrolabe Ent. 2:626-627, pl. 2 fig. 5. (D)
 1835 *Agapophyta bipunctata*: Burmeister, Handb. Ent. 2:347, 353. (S, R)
 1838 *Agapophyta bipunctata*: Guérin-Meneville, Voy. Coq. Ins. 2(2):168. (D)
 1840 *Agapophyta bipunctata*: Blanchard, Hist. Nat. Ins. 3:143. (S, D)
 1843 *Agapophyta bipunctata*: Amyot & Serville, Hist. Nat. Ins. Hem. 1:136. (S, Dn)
 1851 *Agapophyta bipunctata*: Herrich-Schäffer, Wanz. Ins. 9:309. (L)
 1855 *Agapophyta bipunctata*: Montrouzier, Ann. Soc. Agric. Lyon (2)7(1):101. (Dn, H. R)
 1859 *Agapophyta bipunctata*: Dohrn, Cat. Hem. 20. (L)
 1868 *Agapophyta bipunctata*: Vollenhoven, Faune Ent. Indo-Neerl. 3:20-21. (S, D, R)
 1868 *Agapophyta bipunctata*: Walker, Cat. Het. 3:470. (S, R)
 1870 *Agapophyta bipunctata*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S)
 1888 *Agapophyta bipunctata*: Distant, Trans. Ent. Soc. Lond. 1888(4):480. (R)
 1893 *Agapophyta bipunctata*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900 *Agapophyta bipunctata*: Horváth, Zoolog

- Forschungsreisen 5:117. (S, R)
- 1901 Agapophyta bipunctata: Breddin, Abh. Naturf. Ges. Halle 24:13. (R)
- 1905 Agapophyta bipunctata: Kuhlitz, Zool. Jahrb., Suppl. 8, Festschr. Mobius :601, 606-616, figs. G-H, J-N.
- 1907 Agapophyta bipunctata: Schouteden, Ann. Soc. Ent. Belg. 51:112. (L)
- 1909 Agapophyta bipunctata: Kirkaldy, Cat. Hem. 1:346. (S)
- 1933 Agapophyta bipunctata: Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51.
- 1945 Agapophyta bipunctata: Blöte, Zool. Meded. 25:287, fig. 2b. (Dn, R, K)
- 1952 Agapophyta bipunctata: Dupuis, Bull. Soc. Zool. Fr. 77:452, 453. (N)
- 1957 Agapophyta bipunctata: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 447. (Ts, type locality)
- 1968 Agapophyta bipunctata: Black, Ent. Medd. 36:561. (R)
- 1969 Agapophyta bipunctata: Kumar, Aust. J. Zool. 17:557, 559, 560, 567, 569, 572, 581-585, figs. 2, 16, 66-69, 91, 109-113. (M, H, N)
- 1987 Agapophyta bipunctata: Schaefer & Ahmad, Phytophaga 1:27. (H)
- Distribution**: Australia (Queensland, Thursday I.), Bismarck Archipelago (Duke of York Is., New Britain), Malay Peninsula, Moluccas (Aru I., Buru I., Misool Is., Salawati I.), New Guinea (New Guinea, Woodlark I.), Solomons (Kei Is., Kilinailau Is.), Sulawesi (Celebes I.).
- Agapophyta boschmai Blöte, 1845
- 1945 Agapophyta boschmai Blöte, Zool. Meded. 25:287-188, fig. 2c. (K)
- Distribution**: Moluccas (Aru Is.).
- Agapophyta distincta Blöte, 1952
- 1952 Agapophyta distincta Blöte, Zool. Meded. 31(23):256-257, fig. 12.
- Distribution**: New Guinea.
- Agapophyta occidentalis Blöte, 1945
- 1945 Agapophyta occidentalis Blöte, Zool. Meded. 25:287, 288-289, fig. 2.
- Distribution**: Moluccas (Buru I.).
- Agapophyta similis Blöte, 1945
- 1945 Agapophyta similis Blöte, Zool. Meded. 25:287, 289, fig. 2e. (K)
- Distribution**: New Guinea.
- Agapophyta ustulata Blöte, 1945
- 1945 Agapophyta ustulata Blöte, Zool. Meded. 25:287-289, fig. 2f. (K)
- Distribution**: New Guinea.
- Agapophyta vankampeni Blöte, 1945
- 1945 Agapophyta vankampeni Blöte, Zool. Meded. 25:287, 289-290, fig. 2g, h. (K)
- 1968 Agapophyta vankampeni: Black, Ent. Medd. 36:561. (R)
- Distribution**: New Guinea.
- Agapophyta viridula Blöte, 1945
- 1945 Agapophyta viridula Blöte, Zool. Meded. 25:287, 290, fig. 2i. (K)
- 1952 Agapophyta viridula: Blöte, Zool. Meded. 31(23):256, fig. 11. (D)
- 1968 Agapophyta viridula: Cobben, Evol. Trends Het. Eggs: 112, 114, fig. 117. (E)
- 1981 Agapophyta viridula: Hinton, Biol. Ins. Eggs. 1:594.
- Distribution**: New Guinea.
- Axona** Stål, 1865 — see Erga
- Axona longitudinalis (Westwood, 1837) — see Erga longitudinalis
- Chinatessa** Leston, 1955 — see Peltocopta
- Chinatessa natalicoloides Leston, 1955 — see Peltocopta crassiventris
- Coptopelta** Bergroth, 1895 — see Peltocopta
- Coptopelta crassiventris Bergroth, 1895 — see Peltocopta crassiventris
- Cumare** Blöte, 1945
- Type species: Cumare pallida Blöte, 1945, by original designation.
- 1945 Cumare Blöte, Zool. Meded. 25:285.
- 1955 Cumare: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
- 1957 Cumare: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442. (K)
- Cumare pallida Blöte, 1945
- 1945 Cumare pallida Blöte, Zool. Meded. 25:285-286.
- 1957 Cumare pallida: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441-447. (R)
- 1969 Cumare pallida: Kumar, Aust. J. Zool. 17:556, 569, 572, figs. 60-65, 90. (M)
- Distribution**: Australia (Queensland).
- Erga** Walker, 1868
- Type species: Axona: Rhaphigaster longitudinalis Westwood, 1837, by subsequent monotypy (Stål, 1870).
- Erga: Erga roseoflua Walker, 1868 [= Rhaphigaster longitudinalis Westwood, 1837] by monotypy.
- 1865 Axona Stål, Hem. Afr. 1:224. (K) (preoccup. Walker, 1863)
- 1868 Axona: Walker, Cat. Het. 3:477. (L)
- 1868 Erga Walker, Cat. Het. 3:485-486.
- 1870 Axona: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S)
- 1893 Axona: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
- 1909 Erga: Horváth, Ann. Mus. Natn. Hung. 7:631. (N)
- 1909 Axona: Kirkaldy, Cat. Hem. 1:XXXVI. (Tsp)
- 1909 Erga: Kirkaldy, Cat. Hem. 1:345. (S)
- 1955 Erga: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
- 1957 Erga: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440-442. (S, K)
- 1975 Erga: Gross, Hem. S. Australia; pt. 1:78. (D)
- Erga longitudinalis (Westwood, 1837)
- 1837 Rhaphigaster longitudinalis Westwood, Cat. Hope 1:31-32.
- 1867a Axona longitudinalis: Stål, Berl. Ent. Z. 10:157. (L)
- 1868 Axona (sic) longitudinalis: Walker, Cat. Het. 3:477. (S)
- 1868 Erga roseoflua Walker, Cat. Het. 3:486. (syn. by Stål, 1870)
- 1870 Axona longitudinalis: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S, R)
- 1873 Axona longitudinalis: Walker, Cat. Het. Suppl. :25. (S)
- 1893 Axona longitudinalis: Lethierry & Severin, Cat. Gen.

- Hem. 1:223. (S)
 1900a *Axona longitudinalis*: Distant, Ann. Mag. Nat. Hist. (7)6:234. (S)
 1905 *Axona longitudinalis*: Van Duzee, Bull. Amer. Mus. Nat. Hist. 21:211. (R)
 1909 *Erga longitudinalis*: Kirkaldy, Cat. Hem. 1:345. (S)
 1945 *Erga longitudinalis*: Blöte, Zool. Meded. 25:286. (L)
 1957 *Erga longitudinalis*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440. (S)
 1964 *Erga longitudinalis*: Kumar, Proc. R. Soc. Queensl. 75(8):63, text fig. 7b. (M)
 1969 *Erga longitudinalis*: Kumar, Aust. J. Zool. 17:555, 557, 560, 564, 569, 572, 585-589, figs. 1a, 1b, 13, 19, 43-45, 86, 96, 114-118. (M, H, E, N, B)
 1970 *Erga longitudinalis*: Woodward et al., Ins. Austral. 450. (Dn, H)
 1975 *Erga longitudinalis*: Gross, Hem. S. Australia pt. 1:78-79, figs. 16, 17A, 17B. (D, R, T)
 1987 *Erga longitudinalis*: Schaefer & Ahmad, Phytophaga 1:27. (H)
Distribution: Australia.

Erga roseoflua Walker, 1868 — *Erga longitudinalis*

Garceus Distant, 1893

Type species: *Garceus fidelis* Distant, 1893, by monotypy.

- 1893 *Garceus* Distant, Ann. Mag. Nat. Hist. (6)11:434-435.
 1893 *Garceus*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (L)
 1909 *Garceus*: Kirkaldy, Cat. Hem. 1:359. (L)
 1910 *Garceus*: Distant, Ann. Mag. Nat. Hist. (8)6:594-595. (D)
 1957 *Garceus*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442, 447. (K, moved to Oncomerinae)

Garceus fidelis Distant, 1893

- 1893 *Garceus fidelis* Distant, Ann. Mag. Nat. Hist. (6)11:435.
 1893 *Garceus fidelis*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (L)
 1909 *Garceus fidelis*: Kirkaldy, Cat. Hem. 1:359. (L)
 1910 *Garceus fidelis*: Distant, Ann. Mag. Nat. Hist. (8)6:595. (Dn)
 1935 *Garceus fidelis*: Bequaert, Bull. Brooklyn Ent. Soc. 30:183. (maternal care)
 1957 *Garceus fidelis*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 447, fig. 15. (R)
 1969 *Garceus fidelis*: Kumar, Aust. J. Zool. 17:601. (R)
Distribution: Australia (Queensland).

Lynamorpha Westwood, 1837

Type species: *Lynamorpha rosea* Westwood, 1837, designated by Kirkaldy, 1909.

- 1837 *Lynamorpha* Westwood, Cat. Hope 1:27-28.
 1846 *Lynamorpha*: Agassiz, Nomen. Zool. Hem.:12. (Ety)
 1851 *Lynamorpha*: Dallas, List. Hem.:1:318, 346: (K)
 1865 *Lynamorpha*: Stål, Hem. Afr. 1:224. (K)
 1868 *Lynamorpha*: Vollenhoven, Faune Ent. Indo-Neerl. 3:35. (D)
 1870 *Lynamorpha*: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S)
 1893 *Lynamorpha*: Lethierry & Severin, Cat. Gen. Hem. 1:223.
 1900a *Lynamorpha*: Horváth, Term. Füzet. 23:340, 341-344. (K, D, Ks)
 1909 *Lynamorpha*: Kirkaldy, Cat. Hem. 1:345. (S)

- 1914 *Lynamorpha*: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1955 *Lynamorpha*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
 1956 *Lynamorpha*: Miller, Biol. Het. ed. 1:45. (Dn)
 1957 *Lynamorpha*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 442, 447. (K, Ks)
 1970 *Lynamorpha*: Woodward et al., Ins. Austral. 450. (L)
 1971 *Lynamorpha*: Miller, Biol. Het. 54. (Dn)

Lynamorpha subgenus **Diploxiphus** Horváth, 1900

Type species: *Lynamorpha maculifer* Tryon, 1892, by monotypy.

- 1900a *Lynamorpha* (*Diploxiphus*) Horváth, Term. Füzet. 23:344, 352. (K)
 1909 *Lynamorpha* (*Diploxiphus*) (sic): Kirkaldy, Cat. Hem. 1:345. (L)

Lynamorpha (*Diploxiphus*) *brongersmai* Blöte, 1952

- 1952 *Lynamorpha* (*Diploxiphus*) *brongersmai* Blöte, Zool. Meded. 31(23):256, figs. 9-10.

Distribution: New Guinea

Lynamorpha (*Diploxiphus*) *horvathi* Blöte, 1952

- 1952 *Lynamorpha* (*Diploxiphus*) *horvathi* Blöte, Zool. Meded. 31(23):254-256, figs. 7-8.

Distribution: New Guinea

Lynamorpha (*Diploxiphus*) *maculifer* Tryon, 1892

- 1892 *Lynamorpha maculifer* Tryon, Ann. Queensl. Mus. 2:19.

1893 *Lynamorpha maculifer*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)

1900a *Lynamorpha* (*Diploxiphus*) *maculifera* (sic): Horváth, Term. Füzet. 23:344, 352, 353, pl. 9 fig. 8, pl. 10 fig. 8. (K, D)

1909 *Lynamorpha* (*Diploxiphus*) (sic) *maculifera* (sic): Kirkaldy, Cat. Hem. 1:346. (S)

1945 *Lynamorpha* (*Diploxiphus*) (sic) *maculifera* (sic): Blöte, Zool. Meded. 25:286. (R)

1952 *Lynamorpha* (*Diploxiphus*) *maculifer*: Blöte, Zool. Meded. 31(23):254-255, figs. 5-6.

Distribution: Moluccas (Salawati I.) New Guinea (Fakfak I., New Guinea, Yule I.)

Lynamorpha subgenus **Lynamorpha** Westwood, 1837

1900a *Lynamorpha* (*Lynamorpha*) Horváth, Term. Füzet. 23:342, 344. (K, D)

1909 *Lynamorpha* (*Lynamorpha*): Kirkaldy, Cat. Hem. 1:345. (L)

Lynamorpha pallida Westwood, 1837 — see *Lynamorpha rosea*

Lynamorpha (*Lynamorpha*) *perelegans* Vollenhoven, 1868 — NOMEN DUBIUM

1868 *Lynamorpha perelegans* Vollenhoven, Faune Ent. Indo-Neerl. 3:35.

1907a *Lynamorpha perelegans*: Schouteden, Notes Leyden Mus. 30:44. (type not found)

1945 *Lynamorpha perelegans*: Blöte, Zool. Meded. 25:286. (nomen dubium)

Lynamorpha ramifera Walker, 1868 — see *Tamolia ramifera*

Lynamorpha (*Lynamorpha*) *rosea* Westwood, 1837

1837 *Lynamorpha rosea* Westwood, Cat. Hope 1:28.

- 1837 *Lynamorpha pallida* Westwood, Cat. Hope 1:28. (syn. by Dallas, 1851)
 1851 *Lynamorpha rosea*: Dallas, List. Hem. 1:346. (S, R)
 1863 *Lynamorpha rosea*: Stål, Trans. Ent. Soc. Lond. (3)1:598. (cf. *Lynamorpha diluta*)
 1859 *Lynamorpha rosea*: Dohrn, Cat. Hem. :21. (S)
 1868 *Lynamorpha rosea*: Walker, Cat. Het. 3:476. (R)
 1870 *Lynamorpha rosea*: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S)
 1893 *Lynamorpha rosea*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900 *Lynamorpha rosea*: Breddin, Ent. Nachr. Berlin 26(2-3):38, figs. 9, 10. (D)
 1900a *Lynamorpha (Lynamorpha) rosea*: Horváth, Term. Füzet. 23:342, 344, pl. 9 figs. 1, 9. (K, D, S)
 1901c *Lynamorpha rosea*: Distant, Proc. Zool. Soc. Lond. 1900 (4):819, 823. (Ts, S)
 1905 *Lynamorpha rosea*: Van Duzee, Bull. Amer. Mus. Nat. Hist. 21:211. (R)
 1908 *Lynamorpha rosea*: Schouteden, Notes Leyden Mus. 30:47, 48, 49, fig. 1. (cf. *Lynamorpha pallida*)
 1908 *Lynamorpha pallida*: Schouteden, Notes Leyden Mus. 30:47, 48, 49, fig. 2. (not syn.)
 1909 *Lynamorpha (Lynamorpha) rosea*: Kirkaldy, Cat. Hem. 1:345. (S)
 1945 *Lynamorpha (Lynamorpha) rosea*: Blöte, Zool. Meded. 25:286. (syn. with *Lynamorpha pallida* discussed; T)
 1945 *Lynamorpha (Lynamorpha) rosea* var. *pallida*: Blöte, Zool. Meded. 25:286.
 1957 *Lynamorpha rosea*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 447. (S, K, R)
 1962 *Lynamorpha rosea*: Kumar, Ent. Tidskr. 83(1-2):47, 54, figs 23, 65. (Ge)
 1969 *Lynamorpha rosea*: Kumar, Aust. J. Zool. 17:557, 559, 560, 562, 569, 589-594, figs. 3, 10, 12, 18, 32-35, 82, 97, 119-123. (M, H, B, E, N)
 1987 *Lynamorpha rosea*: Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: Australia.

***Lynamorpha* subgenus *Lyrodes* Horváth, 1900**

Type species: *Lynamorpha basalis* Horváth, 1900, designated by Kirkaldy, 1909.

- 1900a *Lynamorpha (Lyrodes)* Horváth, Term. Füzet. 23:342, 345.
 1909 *Lynamorpha (Lyrodes)*: Kirkaldy, Cat. Hem. 1:XXXVI, 345. (Tsp)

***Lynamorpha (Lyrodes) ambigua* Horváth, 1900**

- 1868 *Lynamorpha vollenhovii* (sic): Vollenhoven, Faune Ent. Indo-Neerl. 3:pl. 4 fig. 3, 3a. (only, misdet. sec. Horváth, 1900a)
 1900a *Lynamorpha (Lyrodes) ambigua* Horváth, Term. Füzet. 23:342, 343, 349, pl. 9 fig. 4, pl. 10 fig. 4. (K)
 1907a *Lynamorpha ambigua*: Schouteden, Notes Leyden Mus. 30:44. (L)
 1908 *Lynamorpha ambigua*: Schouteden, Notes Leyden Mus. 30:50-51. (Dn, R)
 1909 *Lynamorpha (Lyrodes) ambigua*: Kirkaldy, Cat. Hem. 1:345-346. (S)
 1919 *Lynamorpha ambigua*: Horváth, Abh. Senckenb. Naturf. Ges. 35(3):308. (R; original description amended)
 1945 *Lynamorpha (Lyrodes) ambigua*: Blöte, Zool. Meded. 25:286. (R)

Distribution: Moluccas (Aru Is., Salawati I.), New Guinea.

***Lynamorpha (Lyrodes) basalis* Horváth, 1900**

- 1900 *Lynamorpha basalis* Horváth, Zoolog. Forschungsreisen 5:633. (only; see also *Lynamorpha (Lyrodes) diluta*)
 1900a *Lynamorpha (Lyrodes) basalis*: Horváth, Term. Füzet. 23:343, 345, pl. 10 fig. 1. (K, D)
 1908 *Lynamorpha basalis*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha (Lyrodes) basalis*: Kirkaldy, Cat. Hem. 1:346. (S)

Distribution: New Guinea.

***Lynamorpha (Lyrodes) breddini* Horváth, 1900**

- 1900 *Lynamorpha diluta*: Breddin, Ent. Nachr. Berlin 26(2-3):35, 36, fig. 5. (only sec. Horváth, 1900a)
 1900a *Lynamorpha (Lyrodes) breddini*: Horváth, Term. Füzet. 23:343, 347-348, pl. 9 fig. 10. (K, D)
 1908 *Lynamorpha breddini*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha (Lyrodes) breddini*: Kirkaldy, Cat. Hem. 1:346. (S)
 1945 *Lynamorpha (Lyrodes) breddini*: Blöte, Zool. Meded. 25:286. (R)
 1964 *Lynamorpha breddini*: Kumar, Proc. R. Soc. Queensl. 75(8):63, fig. 6c (conducting chamber)

Distribution: New Guinea.

***Lynamorpha (Lyrodes) diluta* Stål, 1863**

- 1863 *Lynamorpha diluta* Stål, Trans. Ent. Soc. Lond. (3)1:598.
 1868 *Lynamorpha diluta*: Vollenhoven, Faune Ent. Indo-Neerl. 3:36. (D)
 1868 *Lynamorpha diluta*: Walker, Cat. Het. 3:476. (R)
 1870 *Lynamorpha diluta*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S)
 1893 *Lynamorpha diluta*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
 1900 *Lynamorpha basalis*: Horváth, Zoolog. Forschungsreisen 5:633. (excl. sec. Horváth, 1900a)
 1900 *Lynamorpha diluta*: Breddin, Ent. Nachr. Berlin 26(2-3):35-36, fig. 4. (misdet.; see *Lynamorpha breddini*)
 1900b *Lynamorpha diluta*: Distant, Ann. Mag. Nat. Hist. (7)6:379. (part; Stål's type)
 1900a *Lynamorpha (Lyrodes) diluta*: Horváth, Term. Füzet. 23:342, 343, 348-349, pl. 9 figs. 3, 11. (K, D, S)
 1901 *Lynamorpha diluta*: Breddin, Abh. Naturf. Ges. Halle 24:13. (R)
 1909 *Lynamorpha (Lyrodes) diluta*: Kirkaldy, Cat. Hem. 1:346. (S)
 1912 *Lynamorpha diluta*: Distant, Trans. Ent. Soc. Lond. 1911(3):594. (R)
 1914 *Lynamorpha diluta*: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1969 *Lynamorpha diluta*: Kumar, Aust. J. Zool. 17:562, 569, 572, 595-597, figs. 36, 37, 83, 124-126. (M, N)

Distribution: Moluccas (Aru Is., Salawati I.), New Guinea, Sulawesi (Celebes).

***Lynamorpha (Lyrodes) edulis* Blöte, 1952**

- 1952 *Lynamorpha (Lyrodes) edulis* Blöte, Zool. Meded. 31(23):251-253, figs. 1-2.

Distribution: New Guinea.

***Lynamorpha (Lyrodes) impar* Horváth, 1900**

- 1900a *Lynamorpha (Lyrodes) impar* Horváth, Term. Füzet. 23:343, 346, pl. 10 fig. 2.
 1908 *Lynamorpha impar*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha (Lyrodes) impar*: Kirkaldy, Cat. Hem. 1:346.

Distribution: New Guinea.

Lynamorpha (Lyrodes) *parens* Breddin, 1900

- 1900 *Lynamorpha parens* Breddin, Ent. Nachr. Berlin 26(2-3):37-38, fig. 8.
 1900a *Lynamorpha* (Lyrodes) *parens*: Horváth, Term. Füzet. 23:342, 343, 350, pl. 9 figs. 5, pl. 10 fig. 5. (K, D)
 1908 *Lynamorpha parens*: Schouteden, Notes Leyden Mus. 30:50. (R)
 1908 *Lynamorpha parens*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha* (Lyrodes) *parens*: Kirkaldy, Cat. Hem. 1:346. (S)
 1945 *Lynamorpha* (Lyrodes) *parens*: Blöte, Zool. Meded. 25:286. (R)
 1957 *Lynamorpha parens*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 447. (S, K, R)
 1969 *Lynamorpha parens*: Kumar, Aust. J. Zool. 17:562, 569, 601, figs. 38, 39, 84. (M, R)
 1971 *Lynamorpha parens*: Gaedike, Beitr. Ent. 21(1-2):95. (T)

Distribution: Australia (Queensland), Moluccas (Aru Is.).

Lynamorpha (Lyrodes) *persimilis* Horváth, 1900

- 1900a *Lynamorpha* (Lyrodes) *persimilis* Horváth, Term. Füzet. 23:342, 343, 346-347, pl. 9 fig. 2, pl. 10 fig. 3. (K)
 1908 *Lynamorpha persimilis*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha* (Lyrodes) *persimilis*: Kirkaldy, Cat. Hem. 1:346. (S)
 1919 *Lynamorpha persimilis*: Horváth, Abh. Senckenb. Naturf. Ges. 35(3):308. (original description amended)
 1945 *Lynamorpha* (Lyrodes) *persimilis*: Blöte, Zool. Meded. 25:286. (R)

Distribution: New Guinea.

Lynamorpha (Lyrodes) *picta* Distant, 1893

- 1893 *Lynamorpha picta* Distant, Ann. Mag. Nat. Hist. (6)11:430.
 1893 *Lynamorpha picta*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)
 1900a *Lynamorpha picta*: Horváth, Term. Füzet. 23:351. (as syn. of *Lynamorpha vollenhoveni*)
 1900b *Lynamorpha picta*: Distant, Ann. Mag. Nat. Hist. (7)6:378-379. (cf. *Lynamorpha vollenhoveni*)

Distribution: Moluccas (Bachan Is.)

Lynamorpha (Lyrodes) *plagifer* Blöte, 1952

- 1952 *Lynamorpha* (Lyrodes) *plagifer* Blöte, Zool. Meded. 31(23):253-254, figs. 3-4.

Distribution: New Guinea.

Lynamorpha (Lyrodes) *soror* Breddin, 1900

- 1900 *Lynamorpha soror* Breddin, Ent. Nachr. Berlin 26(2-3):36-37, figs. 6, 7.
 1900a *Lynamorpha* (Lyrodes) *soror*: Horváth, Term. Füzet. 23:343, 350-351, pl. 9 figs. 6, pl. 10 fig. 6. (K, D)
 1908 *Lynamorpha soror*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Lynamorpha* (Lyrodes) *soror*: Kirkaldy, Cat. Hem. 1:346. (S)
 1910a *Lynamorpha* (Lyrodes) *soror*: Kirkaldy, Can. Ent. 42:62. (R)
 1919 *Lynamorpha soror*: Horváth, Abh. Senckenb. Naturf. Ges. 35(3):309. (R)
 1971 *Lynamorpha soror*: Gaedike, Beitr. Ent. 21(1-2):99. (T)

Distribution: New Guinea.

Lynamorpha (Lyrodes) *vollenhoveni* Stål, 1867

- 1867 *Lynamorpha vollenhoveni* Stål, Tijdschr. Ent. (2)2:124.
 1868 *Lynamorpha vollenhovii* (sic): Vollenhoven, Faune Ent. Indo-Neerl. 3:35-36, pl. 4, fig. 3 and fig. 3 (sec. Horváth, 1900a, figs. 3 and 3a misdet.; see *Lynamorpha ambigua*)
 1868 *Lynamorpha vollenhoveni*: Walker, Cat. Het. 3:476. (S)
 1870 *Lynamorpha vollenhoveni*: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S, R)
 1893 *Lynamorpha picta*: Distant, Ann. Mag. Nat. Hist. (6)11:430. (syn. by Horváth, 1900, disputed by Distant, 1900)
 1893 *Lynamorpha vollenhoveni*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900 *Lynamorpha vollenhoveni*: Breddin, Ent. Nachr. Berlin 26(2-3):34-35, fig. 3. (S, Dn, R)
 1900a *Lynamorpha* (Lyrodes) *vollenhovii* (sic): Horváth, Term. Füzet. 23:343, 351-352, pl. 9 fig. 7, pl. 10 fig. 7. (K, D, S)
 1908 *Lynamorpha vollenhoveni*: Schouteden, Notes Leyden Mus. 30:49-50. (Vollenhoven's specimens)
 1909 *Lynamorpha* (Lyrodes) *vollenhoveni*: Kirkaldy, Cat. Hem. 1:346. (S)
 1945 *Lynamorpha* (Lyrodes) *vollenhoveni*: Blöte, Zool. Meded. 25:286. (R)

Distribution: Moluccas (Aru Is., Bachan Is., Halmahera I., Morotai I., Waigeo I.), New Guinea.

Merocoris Burmeister, 1834 — see *Plisthenes*

Merocoris merianae (Fabricius, 1775) — see *Plisthenes merianae*

Mesolea Breddin, 1902 — see *Neosalica*

Mesolea pedestris Breddin, 1902 — see *Neosalica pedestris*

Musgraveia Leston & Scudder, 1957

Type species: *Oncoscelis sulciventris* Stål, 1863, by original designation.

- 1957 *Musgraveia* Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 443, 445-447. (K, Ks)

Musgraveia antennatus (Distant, 1880)

- 1880 *Oncoscelis antennatus* Distant, Trans. Ent. Soc. Lond. 1880(3):150-151, pl. 5, fig. 6.
 1893 *Oncoscelis antennatus*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)
 1909 *Rhoecocoris antennatus*: Kirkaldy, Cat. Hem. 1:345. (L)
 1957 *Musgraveia antennatus*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 446, 447, fig. 4. (K)
 1969 *Musgraveia antennatus*: Kumar, Aust. J. Zool. 17:562, 569, 601, figs. 29-31, 81. (M, R)

Distribution: Australia (Queensland, Torres Straits).

Musgraveia sulciventris (Stål, 1863)

- 1863 *Oncoscelis sulciventris* Stål, Trans. Ent. Soc. Lond. (3)1:598-599.
 1868 *Oncoscelis sulciventris*: Walker, Cat. Het. 3:477. (R)
 1870 *Oncoscelis sulciventris*: Stål, Sv. Vet. Akad. Handl. 9(1):61. (R)
 1892 *Oncoscelis sulciventris*: Olliff, Agric. Gaz. N.S.W. 3:368-370, pl. 24A. (B)
 1893 *Oncoscelis sulciventris*: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)

- 1901 *Stilida indecora*: Froggatt, Agric. Gaz. N.S.W. 12(12):1596-1597, fig. 13. (misdet. sec. Froggatt, 1907; H, R, I)
- 1905 *Oncoscelis sulciventris*: Van Duzee, Bull. Amer. Mus. Nat. Hist. 21:211. (R)
- 1907 *Rhoecocoris (Oncoscelis) sulciventris*: Froggatt, Australian Insects: 331, pl. 31 fig. 13. (H, Dn)
- 1909 *Rhoecocoris sulciventris*: Kirkaldy, Cat. Hem. 1:345. (S, H)
- 1924 *Oncoscelis sulciventris*: Girault, Bull. Div. Ent. Pl. Path. Qd. 1:1-24. (B)
- 1935 *Rhoecocoris sulciventris*: Summerville, Queensl. Agric. J. 43:245-253, pl. 108 figs. 1-7. (R, H, E, I, D, B)
- 1938 *Rhoecocoris sulciventris*: Hely, Agric. Gaz. N.S.W. 49:378-379, 2 figs. (B)
- 1945 *Rhoecocoris sulciventris*: Blöte, Zool. Meded. 25:285. (L)
- 1957 *Musgraveia sulciventris*: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 446, 447, figs. 1-3. (K)
- 1961 *Rhoecocoris sulciventris*: Waterhouse et al., J. Ins. Physiol. 6:116-118. (sgf)
- 1962 *Lynamorpha sulciventris*: Kumar, Ent. Tidskr. 83(1-2):47, figs 20-22. (Ge)
- 1962 *Rhoecocoris sulciventris*: Park & Sutherland, Aust. J. Chem. 15(2):172-174. (sgf)
- 1964 *Musgraveia sulciventris*: Kumar, Proc. R. Soc. Queensl. 75(8):63, fig. 7a. (M)
- 1967 *Musgraveia sulciventris*: Gilby & Waterhouse, Nature 216:91. (sgf)
- 1969 *Musgraveia sulciventris*: Kumar, Aust. J. Zool. 17:557, 559, 560, 569, 572-576, figs. 7, 11, 15, 25-28, 80, 94, 99-103. (M, H, E, N)
- 1969 *Musgraveia sulciventris*: McDonald, Aust. J. Zool. 17:817-820. (B)
- 1970 *Musgraveia sulciventris*: Woodward et al., Ins. Austral. 450, fig. 26.64A (Dn, H)
- 1975 *Musgraveia sulciventris*: Macleod et al., J. Ins. Physiol. 21:1219-1223. (sgf)
- 1979 *Musgraveia sulciventris*: Staddon, Adv. Ins. Physiol. 14:403. (scent gland)
- 1981 *Musgraveia sulciventris*: Blum, Chem. Def. Arths. 54, 58, 66, 113-114, 116. (sgf)
- 1987 *Musgraveia sulciventris*: Schaefer & Ahmad, Phytophaga 1:27. (H)
- Distribution:** Australia: (Queensland, N.S. Wales).
- 1:64, fig. 300. (K)
- 1980 *Mesolea*: Chen, Ghizhou Agric. Sci. 1980(3):55. (S, D)
- Neosalica forbesi** Distant, 1882
- 1882 *Neosalica forbesi* Distant, Ent. Mo. Mag. 19(223):157-158.
- 1893 *Neosalica forbesi*: Lethierry & Severin, Cat. Gen. Hem. 1:225 (L)
- 1909 *Neosalica forbesi*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1955 *Neosalica forbesi*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):67. (L)
- 1969 *Neosalica forbesi*: Kumar, Aust. J. Zool. 17:569, 572, figs. 77, 78. (M)
- Distribution:** Sumatra.
- Neosalica nigrovittata* Distant, 1921 — see *Neosalica pedestris*
- Neosalica pedestris* (Breddin, 1902).
- 1902 *Mesolea pedestris* Breddin, Wien. Ent. Ztg. 21(4):100-101.
- 1908 *Mesolea pedestris*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
- 1908 *Mesolea pedestris*: Distant, Faun. Brit. India Rh. 4(2):457. (D, after Breddin)
- 1909 *Mesolea pedestris*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1921 *Neosalica nigrovittata* Distant, Entomol. 54:(698)164-165. (syn. by Leston, 1955)
- 1932a *Neosalica nigrovittata*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
- 1935 *Neosalica nigrovittata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:129. (R)
- 1935 *Neosalica nigrovittata*: Tang, Cat. Ins. Sin. 2:362. (R)
- 1948 *Neosalica nigrovittata*: Hoffmann, Lingnan Sci. J. 22(1-4):28. (not in China)
- 1955 *Neosalica pedestris*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):67. (S, R)
- 1962 *Neosalica pedestris*: Yang, Econ. Ins. Fauna China 2:40, 43-44, pl. 4 fig. 31.
- 1971 *Neosalica pedestris*: Gaedike, Beitr. Ent. 21(1-2):95. (T)
- 1980 *Mesolea pedestris*: Chen, Ghizhou Agric. Sci. 1980(3):54, 55-56. (S, K)
- Distribution:** Myanmar, China (Yunnan), India (North India, Sikkim), Vietnam.

Neosalica Distant, 1882

Type species: *Neosalica: Neosalica forbesi* Distant, 1882, by monotypy.

Mesolea: Mesolea pedestris Breddin, 1902, by monotypy.

- 1882 *Neosalica* Distant, Ent. Mo. Mag. 19(223):157.
- 1893 *Neosalica*: Lethierry & Severin, Cat. Gen. Hem. 1:225 (L).
- 1902 *Mesolea* Breddin, Wien. Ent. Ztg. 21(4):99-100. (syn. by Distant, 1921)
- 1908 *Mesolea*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
- 1908 *Mesolea*: Distant, Faun. Brit. India Rh. 4(2):456-457. (D, after Breddin)
- 1909 *Mesolea*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1909 *Neosalica*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1921 *Neosalica*: Distant, Entomol. 54:(698)164. (S)
- 1935 *Neosalica*: Tang, Cat. Ins. Sin. 2:362. (R)
- 1955 *Neosalica*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63, 67, fig. 6. (K, S)
- 1977 *Mesolea*: Hsiao et al., Handb. Chinese Hem.-Het.

Oncomeris Laporte, 1833

Type species: *Tessaratomy flavicornis* Guérin-Ménéville, 1831, by monotypy.

- 1833 *Oncomeris* Laporte, Mag. Zool. (Guérin-Ménéville). 2:55, 60. (K)
- 1835 *Oncomeris* (sic): Burmeister, Handb. Ent. 2:347, 352. (part; K, D)
- 1840 *Oncomeris*: Blanchard, Hist. Nat. Ins. 3:142. (part; D)
- 1843 *Oncomeris* (sic): Amyot & Serville, Hist. Nat. Ins. Hem. :XXVIII, 168-169. (K, D)
- 1844 *Oncomeris* (sic): Herrich-Schäffer, Wanz. Ins. 7:123. (D)
- 1846 *Oncomeris*: Agassiz, Nomen. Zool. :14. (Ety)
- 1846 *Oncomeris* (sic): Agassiz, Nomen. Zool. Hem. :14. (Ety)
- 1850 *Oncomeris*: Spinola, Gen. Ins. Artr. :31. (K)
- 1851 *Oncomeris*: Dallas, List. Hem. 1:318, 346. (K, S)
- 1851 *Oncomeris*: Herrich-Schäffer, Wanz. Ins. 9:383. (K)
- 1852 *Oncomeris*: Spinola, Mem. Soc. Ital. Modena 25(1):71. (reprint of 1850 paper)

- 1865 Oncomeris: Stål, Hem. Afr. 1:223. (K)
 1868 Oncomeris: Vollenhoven, Faune Ent. Indo-Neerl. 3:29. (D)
 1870 Oncomeris: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S)
 1893 Oncomeris: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a Oncomeris: Horváth, Term. Füzet. 23:341, 353-354. (K, Ks)
 1909 Oncomeris: Kirkaldy, Cat. Hem. 1:XXXVI, 347. (Tsp, S)
 1914 Oncomeris: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1955 Oncomeris: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
 1956 Oncomeris: Miller, Biol. Het. ed. 1:45. (Dn)
 1957 Oncomeris: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442. (K)
 1970 Oncomeris: Woodward et al., Ins. Austral. :pl. 3, fig. 5. (colored fig.)
 1971 Oncomeris: Miller, Biol. Het. :54. (Dn)

Oncomeris bernsteinii Vollenhoven, 1868

- 1868 Oncomeris (sic) bernsteinii Vollenhoven, Faune Ent. Indo-Neerl. 3:30-31, pl. 4 fig. 1.
 1868 Oncomeris bernsteinii: Walker, Cat. Het. 3:475. (L)
 1870 Oncomeris bernsteinii: Stål, Sv. Vet. Akad. Handl. 9(1):63. (R)
 1893 Oncomeris bernsteinii: Lethierry & Severin, Cat. Gen. Hem. 1:224. (L)
 1900a Oncomeris bernsteinii: Breddin, Abh. Senckenb. Naturf. Ges. 25:147. (R)
 1900a Oncomeris bernsteinii: Horváth, Term. Füzet. 23:354-357. (K, D)
 1907a Oncomeris bernsteinii: Schouteden, Notes Leyden Mus. 30:44. (T, Dn)
 1909 Oncomeris bernsteinii: Kirkaldy, Cat. Hem. 1:347. (S)
 1945 Oncomeris bernsteinii: Blöte, Zool. Meded. 25:290. (R, T)

Distribution: Moluccas (Halmahera I., Morotai I.).

Oncomeris chrysoptera Vollenhoven, 1868

- 1868 Oncomeris flavicornis var. chrysoptera Vollenhoven, Faune Ent. Indo-Neerl. 3:30, pl. 4 fig. 2.
 1900a Oncomeris chrysoptera: Horváth, Term. Füzet. 23:353, 355, figs. 1, 3, 5. (K, D, R)
 1909 Oncomeris chrysoptera: Kirkaldy, Cat. Hem. 1:347. (S)
 1945 Oncomeris chrysoptera: Blöte, Zool. Meded. 25:290. (R, T)

Distribution: New Guinea, Moluccas (Waigeo I.).

Oncomeris chrysoptera ramulosus Horváth, 1900

- 1900a Oncomeris chrysoptera var. ramulosus Horváth, Term. Füzet. 23:355.
 1909 Oncomeris chrysoptera var. ramulosa: Kirkaldy, Cat. Hem. 1:347. (L)
 1945 Oncomeris chrysoptera var. ramulosa: Blöte, Zool. Meded. 25:290. (R)

Distribution: Moluccas (Aru Is., Ternate I.), New Guinea.

Oncomeris dilatatus Vollenhoven, 1868 — see Plisthenes confusus

Oncomeris flavicornis (Guérin-Ménéville, 1831)

- 1831 Tessaratoma flavicornis Guérin-Ménéville, Voy. Coq. Ins. 2(2)1:pl. 12 fig. 2. (no text)
 1833 Oncomeris flavicornis: Laporte, Mag. Zool. (Guérin), 2:60. (Tsp)

- 1835 Tessaratoma flavicornis: Boisduval, Voy. Astrolabe Ent. 2:631-632, pl. 2 fig. 10.
 1835 Oncomeris (sic) flavicornis: Burmeister, Handb. Ent. 2:353. (Dn, R)
 1838 Tessaratoma flavicornis: Guérin-Ménéville, Voy. Coq. Ins. 2(2)1:171 (D)
 1840 Oncomeris flavicornis: Blanchard, Hist. Nat. Ins. 3:142. (S, D)
 1843 Oncomeris (sic) flavicornis: Amyot & Serville, Hist. Nat. Ins. Hem. :169. (S, Dn)
 1844 Oncomeris (sic) flavicornis: Herrich-Schäffer, Wanz. Ins. 7:123. (L)
 1851 Oncomeris (sic) flavicornis: Herrich-Schäffer, Wanz. Ins. 9:308. (L)
 1851 Oncomeris flavicornis: Dallas, List. Hem. 1:346. (S, R)
 1859 Oncomeris flavicornis: Dohrn, Cat. Hem. :21. (L)
 1868 Oncomeris (sic) flavicornis: Vollenhoven, Faune Ent. Indo-Neerl. 3:30. (S, D, R)
 1868 Oncomeris flavicornis: Walker, Cat. Het. 3:475. (R)
 1870 Oncomeris flavicornis: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S, R)
 1893 Oncomeris flavicornis: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a Oncomeris flavicornis: Horváth, Term. Füzet. 23:353, 356-357, figs. 4, 6. (K, D, S, R)
 1901 Oncomeris flavicornis: Breddin, Abh. Naturf. Ges. Halle 24:13. (R)
 1907 Oncomeris flavicornis: Froggatt, Australian Insects:331. (Dn)
 1909 Oncomeris flavicornis: Kirkaldy, Cat. Hem. 1:347. (S)
 1914 Oncomeris flavicornis: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1945 Oncomeris flavicornis: Blöte, Zool. Meded. 25:290. (R)
 1952 Oncomeris flavicornis: Dupuis, Bull. Soc. Zool. Fr. 77:449, 451. (N)
 1957 Oncomeris flavicornis: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:442, 447-448. (S, R)
 1969 Oncomeris flavicornis: Kumar, Aust. J. Zool. 17:555, 557, 560, 565, 569, 601, figs. 9, 17, 46-49, 87. (M, R)
Distribution: Australia (Queensland), Lesser Sunda Is. (Timor I.), Moluccas (Aru Is., Buru I., Ternate I., Waigeo I.), New Guinea, Sulawesi (Celebes).

Oncomeris flavicornis chrysoptera Vollenhoven, 1868 — see Oncomeris chrysoptera

Oncomeris flavicornis gigantea Horváth, 1900

- 1900a Oncomeris flavicornis var. gigantea Horváth, Term. Füzet. 23:357, fig. 7.
 1909 Oncomeris flavicornis var. gigantea: Kirkaldy, Cat. Hem. 1:347. (L)
 1945 Oncomeris flavicornis var. gigantea: Blöte, Zool. Meded. 25:290. (R)

Distribution: New Guinea.

Oncomeris merianae (Fabricius, 1775) — see Plisthenes merianae

Oncomeris ostraciopoda (Montrouzier, 1855)

- 1855 Tessaratoma ostraciopoda Montrouzier, Ann. Soc. Agric. Lyon (2)7(1):99-100.
 1859 Oncomeris socius Stål, Eugénies Resa :232. (syn. by Stål, 1870)
 1868 Oncomeris socius: Walker, Cat. Het. 3:475. (R)
 1870 Oncomeris ostraciopoda: Stål, Sv. Vet. Akad. Handl. 9(1):62. (S, R)
 1873 Oncomeris ostraciopoda: Walker, Cat. Het. Suppl. :25. (S)

- 1893 Oncomeris ostraciopertus (sic): Lethierry & Severin, Cat. Gen. Hem. 1:224.
 1900a Oncomeris ostraciopertus: Horváth, Term. Füzet. 23:354, 358. (K, D, S, R)
 1909 Oncomeris ostraciopertus: Kirkaldy, Cat. Hem. 1:347. (S)
 1921 Oncomeris ostraciopertus: Lehmann, Arch. Naturges. Berlin. 87A(6):36. (R, Dn, T)

Distribution: New Caledonia, New Guinea (Woodlark I.).

Oncomeris robustus (Lepeltier & Serville, 1828) — see Eusthenes robustus

Oncomeris socius Stål, 1859 — see Oncomeris ostraciopertus

Oncomeris vicina Horváth, 1900

- 1900a Oncomeris vicina Horváth, Term. Füzet. 23:354, 358-359, fig. 2. (K)
 1908 Oncomeris vicina: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 Oncomeris vicina: Kirkaldy, Cat. Hem. 1:347. (L)
 1968 Oncomeris vicina: Black, Ent. Medd. 36:561. (R)

Distribution: Bismarck Archipelago (New Britain I.).

Oncomeris Laporte, 1833 — misspelling of Oncomeris

Oncoscelis Westwood, 1836 — see Rhoecus

Oncoscelis antennatus Distant, 1880 — see Musgraveia antennatus

Oncoscelis australasiae Westwood, 1836 — see Rhoecus australasiae

Oncoscelis sulciventris Stål, 1863 — see Musgraveia sulciventris

Peltocopta Bergroth, 1904

Type species: Coptopelta: Coptopelta crassiventris Bergroth, 1895, by monotypy.

Chinatessa: Chinatessa natalicoloides Leston, 1955, by original designation.

- 1895 Coptopelta Bergroth, Proc. R. Soc. Vict. 7(1894):290-291. (preoccup. Heude, 1880)
 1904 Peltocopta Bergroth, Wien. Ent. Ztg. 23(2):40. (Nn for Coptopelta Bergroth, 1895)
 1908 Peltocopta: Bergroth, Mem. Soc. Ent. Belg. 15:184 (S)
 1909 Peltocopta: Kirkaldy, Cat. Hem. 1:353. (syn)
 1955 Chinatessa Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63, 64-66. (syn. by Leston & Scudder, 1957)
 1957 Peltocopta: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 442, 447. (S, K)

Peltocopta crassiventris (Bergroth, 1895)

- 1895 Coptopelta crassiventris Bergroth, Proc. R. Soc. Vict. 7(1894):291.
 1908 Peltocopta crassiventris: Bergroth, Mem. Soc. Ent. Belg. 15:184 (L)
 1909 Peltocopta crassiventris: Kirkaldy, Cat. Hem. 1:353. (L)
 1955 Chinatessa natalicoloides Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):66-67, figs. 1-5. (syn. by Leston & Scudder, 1957)
 1957 Peltocopta crassiventris: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:441, 447. (S, R)
 1964 Peltocopta crassiventris: Kumar, Proc. R. Soc. Queensland. 75(8):63-64, fig. 7c. (M)
 1969 Peltocopta crassiventris: Kumar, Aust. J. Zool. 17:557, 562, 569, 572, 597-600, figs. 4, 6, 14, 40-42, 85, 98,

127-129. (M, H, E, N, B)

1970 Peltocopta crassiventris: Woodward et al., Ins. Austral. pl. 3, fig. 7. (colored fig.)

1987 Peltocopta crassiventris: Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: Australia (N.S. Wales, Queensland).

Piezosternaria - see **ONCOMERINIAE**

PIEZOSTERNINI - see **ONCOMERINIAE**

Piezosternum Amyot & Serville, 1843

Type species: Piezosternum: Piezosternum mucronatum (Palisot de Beauvois, 1806) [= Cimex subulatus Thunberg, 1783], designated by Kirkaldy, 1903.

Salica: Salica excellens Walker, 1868 [= Cimex subulatus Thunberg, 1783] by monotypy.

- 1843 Piezosternum Amyot & Serville, Hist. Nat. Ins. Hem.:XXVII, 162-163. (K)
 1846 Piezosternum: Agassiz, Nomen. Zool. Add.:10. (Ety)
 1851 Piezosternum: Dallas, List. Hem. 1:317, 338. (K)
 1851 Piezosternum: Herrich-Schäffer, Wanz. Ins. 9:284. (K)
 1865 Piezosternum: Stål, Hem. Afr. 1:224, 227-228.
 1868 Salica Walker, Cat. Het. 3:469. (syn. by Stål, 1870)
 1870 Piezosternum: Stål, Sv. Vet. Akad. Handl. 9(1):63. (S)
 1881 Piezosternum: Distant, Biol. Cent. Am. Rh. 1:101. (S, Dn)
 1889 Piezosternum: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):82. (D)
 1893 Piezosternum: Lethierry & Severin, Cat. Gen. Hem. 1:225. (S)
 1900 Piezosternum: Distant, Ann. Mag. Nat. Hist. (7)6:62. (S)
 1903 Piezosternum: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1905 Piezosternum: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):214-215. (S, D, Ks, Tsp)
 1909 Piezosternum: Kirkaldy, Cat. Hem. 1:348. (S)
 1939 Piezosternum: Torre-Bueno, Ent. Am. 19(4): 243. (D)
 1952a Piezosternum: Villiers, Init. Afr. 9:83. (D)
 1955 Piezosternum: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63. (K)
 1956 Piezosternum: Miller, Biol. Het., ed. 1:45. (Dn)
 1964 Piezosternum: Schaefer, Ann. Ent. Soc. Am. 57(6):680. (cf. Coreoidea)
 1971 Piezosternum: Pirán, Acta Zool. Lill. 26:200, 202. (D, Ks of Am.)
 1971 Piezosternum: Miller, Biol. Het. :54. (Dn)
 1981 Piezosternum: Froeschner, Smithson. Contr. Zool. 322: 95. (Tsp)
 1988 Piezosternum: Froeschner, Cat. Het. :695. (Tsp)

Piezosternum subgenus Piezosternias Kirkaldy, 1909

Type species: Cimex calidus Fabricius, 1787, by original designation.

1909 Piezosternum subgen. Piezosternias Kirkaldy, Cat. Hem. 1:348.

Piezosternum calidum (Fabricius, 1787)

- 1787 Cimex calidus Fabricius, Mant. Ins. 2:292.
 1790 Cimex calidus: Gmelin, Syst. Nat. 1. 4:2153.
 1794 Cimex papillosus: Fabricius, Ent. Syst. 4:106-107. (misdet. sec. Stål, 1865)
 1803 Cimex calidus: Fabricius, Syst. Rh. :168. (Dn)
 1806 Pentatoma tenebraria Palisot de Beauvois, Ins. Afr.

- Am.:46, pl. 6 fig., 3, 4. (syn. by Stål, 1865)
- 1837 Edessa vicina Westwood, Cat. Hope 1:29. (syn. by Stål, 1865)
- 1843 Piezosternum tenebraria: Amyot & Serville, Hist. Nat. Ins. Hem.:162. (Dn, Ts)
- 1851 Piezosternum tenebraria: Herrich-Schäffer, Wanz. Ins. 9:310. (Africa in error)
- 1851 Piezosternum mucronatum: Dallas, List. Hem. 1:338. (misdet. sec. Stål, 1865)
- 1865 Piezosternum calidum: Stål, Hem. Afr. 1:228. (D, S)
- 1868 Piezosternum calidum: Stål, Sv. Vet. Akad. Handl. 7(11):40. (S, R, T)
- 1868 Piezosternum mucronatum: Walker, Cat. Het. 3:457. (R, misdet.)
- 1870 Piezosternum calidum: Stål, Sv. Vet. Akad. Handl. 9(1):63-64. (S, R)
- 1873 Piezosternum calidum: Walker, Cat. Het. Suppl.:24, 25. (S)
- 1879 Piezosternum calidum: Distant, Trans. Ent. Soc. Lond. 1879(2):211. (cf. Piezosternum rubens)
- 1884 Piezosternum calidum: Reuter, Öfv. Finska Vet.-Soc. Förh. 25(1882-1883):9. (R)
- 1890 Piezosternum calidum: Distant, Ann. Soc. Ent. Belg., 34 c.r. (ser. 4)(5):53. (R)
- 1890b Piezosternum calidum: Distant, Proc. Zool. Soc. Lond. 1890(3):477. (R)
- 1892 Piezosternum calidum: Gerstaecker, Jb. Hamb. Wiss. Anst. 9(2):5. (R)
- 1893 Piezosternum calidum: Lethierry & Severin, Cat. Gen. Hem. 1:225. (S)
- 1893 Piezosternum calidum: Bergroth, J. Sci. Math. Phys. Nat. (2)10:123. (R)
- 1894 Piezosternum calidum: Haglund, Öfv. Vet. Akad. Förh. 51(8):406. (R)
- 1894 Piezosternum calidum: Karsch, Stett. Ent. Ztg. 55:100. (R)
- 1898 Piezosternum calidum: Distant, Ann. Mag. Nat. Hist. (7)2:315. (R)
- 1901c Piezosternum calidum: Distant, Proc. Zool. Soc. Lond. 1900(4):823. (S)
- 1904 Piezosternum calidum: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:148, 160. (R)
- 1905 Piezosternum calidum: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):215-217, figs. 65-67, pl. 5, fig. 1. (K, S, D, R)
- 1905a Piezosternum calidum: Schouteden, Ann. Soc. Ent. Belg. 49:15. (R)
- 1909 Piezosternum calidum: Schouteden, Ann. Mus. Congo Belge Zool. (3)2, 1, 1:67. (R)
- 1909 Piezosternum (Piezosternias) calidum: Kirkaldy, Cat. Hem. 1:348. (S)
- 1910 Piezosternum calidum: Schouteden, Ann. Soc. Ent. Belg. 54:405. (R)
- 1910a Piezosternum calidum: Schouteden, Sjöstedt's Kilim. Meru Exp. 12(6):92. (R)
- 1911 Piezosternum calidum: Schouteden, Rev. Zool. Afr. 1:185. (R)
- 1913 Piezosternum calidum: Schouteden, Rev. Zool. Afr. 2(2):197. (R)
- 1913 Piezosternum calidum: Jaannel, Voy. Alluaud Hem. 1:109. (S, R)
- 1922 Piezosternum calidum: Courteaux, Anim. Art. 1:272. (R)
- 1929 Piezosternum calidum: Schouteden, Rev. Zool. Bot. Afr. 17(1):64. (R)
- 1934 Piezosternum calidum: Mayné & Ghesquiere, Ann. Gembloux 40(1):12. (R, H)
- 1945 Piezosternum (Piezosternias) calidum: Blöte, Zool. Meded. 25:291. (R)
- 1949 Piezosternum calidum: Villiers, I.F.A.N. Catalogues 5:89. (R)
- 1952 Piezosternum calidum: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
- 1952b Piezosternum calidum: Villiers, Mem. I.F.A.N. 19:307. (R)
- 1952a Piezosternum calidum: Villiers, Init. Afr. 9:84, figs. 106, 107. (Dn, R)
- 1954 Piezosternum calidum: Leston, Publ. Cult. Comp. Diam. Angola 24:13, figs. 1-3. (D, R)
- 1955 Piezosternum calidum: Leston, Ent. Mo. Mag. 91:33, figs. 3-5. (H, E)
- 1957a Piezosternum calidum: Schouteden, Ann. Mus. Congo Belge, Tervuren, Zool. 58:278. (R)
- 1959 Piezosternum calidum: Scudder, Trans. Ent. Soc. Lond. 111(14):413. (Ge)
- 1964 Piezosternum calidum: Schouteden, Rev. Zool. Bot. Afr. 70(1-2):95. (R)
- 1967 Piezosternum calidum: Villiers, Bull. I.F.A.N. (ser, A) 29(4):1807. (R)
- 1969 Piezosternum calidum: Kumar, Aust. J. Zool. 17:557, 559, 560, 567, 569, 572, figs. 5, 20, 70a, 70b, 71-73, 92. (M)
- 1978 Piezosternum calidum: Goodchild, Ent. Exp. & Appl. 23:177-188. (symbionts)
- 1980 Piezosternum calidum: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
- 1982a Piezosternum calidum: Linnavuori, Acta Zool. Fenn. 163:11. (R)
- 1982 Piezosternum calidum: Nuamah, Insect Sci. Application 3(1):11, 13, 25, fig. 8.95. (C)
- Distribution:** Angola, Cameroon, Cape Verde Islands, Congo, Gabon, Ghana, Guinea, Ivory Coast, Malawi, Nigeria, Ruanda, Sierra Leone, Zaire, Zanzibar.
- Piezosternum calidum breddini Schouteden, 1905
- 1905 Piezosternum (Piezosternum) calidum breddini: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):215, 217-218, 275, figs. 68-70, 133. (K, I)
- 1909 Piezosternum calidum breddini: Schouteden, Ann. Mus. Congo Belge Zool. (3)2, 1, 1:68. (R)
- 1937 Piezosternum calidum var. breddini: Mancini, Boll. Soc. Ent. Ital. 69(1-2):43. (R)
- 1939 Piezosternum calidum var. breddini: Mancini, Ann. Mus. Civ. Storia Nat. Genova 58:305. (R)
- 1945 Piezosternum (Piezosternias) calidum var. breddini: Blöte, Zool. Meded. 25:291. (R)
- 1952 Piezosternum calidum var. breddini: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
- 1952a Piezosternum breddini: Villiers, Init. Afr. 9:83-84. (D, R)
- 1956 Piezosternum breddini: Villiers, Ent. Arb. Mus. Gg. Frey 7:213. (R)
- 1980 Piezosternum breddini: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
- 1982a Piezosternum calidum breddini: Linnavuori, Acta Zool. Fenn. 163:11. (R, Dn)
- 1982 Piezosternum calidum breddini: Linnavuori, Monit. Zool. Ital. (N.S.) Suppl. 16(1):18. (R)
- Distribution:** Congo, Guinea, Kenya, Nigeria, Somalia, Tanzania, Togo, Zaire, Zimbabwe.
- Piezosternum fallax Breddin, 1898
- 1898 Piezosternum fallax Breddin, Ent. Nachr. Berlin 24(17):264-265.
- 1901 Piezosternum calidum: Distant, Ann. Soc. Ent. Belg. 45(1):28. (part. misdet. sec. Schouteden, 1905)

- 1904 *Piezosternum fallax*: Schouteden, Ann. Soc. Ent. Belg. 48:144. (R)
- 1904 *Piezosternum fallax*: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:148. (R)
- 1905 *Piezosternum fallax*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):215, 218-219, figs. 71-73. (K, D, R)
- 1908 *Piezosternum fallax*: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
- 1909 *Piezosternum fallax*: Kirkaldy, Cat. Hem. 1:348. (S)
- 1909 *Piezosternum fallax*: Schouteden, Ann. Mus. Congo Belge Zool. (3)2, 1, 1:68. (R)
- 1929 *Piezosternum fallax*: Schouteden, Rev. Zool. Bot. Afr. 17(1):64. (R)
- 1934 *Piezosternum fallax*: Mayne & Ghesquiere, Ann. Gembloux 40(1):12. (H, R)
- 1945 *Piezosternum (Piezosternias) fallax*: Blöte, Zool. Meded. 25:291. (R)
- 1952 *Piezosternum fallax*: Leston, Ann. Mag. Nat. Hist. (12)5:903. (R)
- 1952b *Piezosternum fallax*: Villiers, Mem. I.F.A.N. 19:307. (R)
- 1952a *Piezosternum fallax*: Villiers, Init. Afr. 9:84. (Dn, H)
- 1956 *Piezosternum fallax*: Leston, Bull. I.F.A.N. 18A(2):618. (R)
- 1969 *Piezosternum fallax*: Kumar, Aust. J. Zool. 17:567, 569, figs. 74-76. (M)
- 1971 *Piezosternum fallax*: Gaedike, Beitr. Ent. 21(1-2):85. (T)
- 1975 *Piezosternum fallax*: Linnavuori, Bol. Soc. Port. Cienc. Nat. (ser. 2) 15:8. (R)
- 1980 *Piezosternum fallax*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
- 1982a *Piezosternum fallax*: Linnavuori, Acta Zool. Fenn. 163:11, fig. 1a. (R)
- Distribution:** Cameroon, Central African Rep., Congo, Equatorial Guinea, Ghana, Guinea, Ivory Coast, Nigeria, Sierra Leone, Sudan, Tanzania, Togo, Zaire.

Piezosternum rubens Distant, 1879

- 1879 *Piezosternum rubens* Distant, Trans. Ent. Soc. Lond. 1879(2):210-211, pl. 5 fig. 8.
- 1893 *Piezosternum rubens*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
- 1905 *Piezosternum rubens*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):215, 219-220. (K, D)
- 1909 *Piezosternum (Piezosternias) rubens*: Kirkaldy, Cat. Hem. 1:348. (L)
- 1945 *Piezosternum (Piezosternias) rubens*: Blöte, Zool. Meded. 25:291. (R)
- 1952 *Piezosternum rubens*: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):289, figs. 136-139, pl. 8 fig. 3.

Distribution: Madagascar.

Piezosternum subgenus *Piezosternum* Thunberg, 1783

- 1909 *Piezosternum* subgen. *Piezosternum* Kirkaldy, Cat. Hem. 1:348.

Piezosternum subulatum (Thunberg, 1783)

- 1783 *Cimex subulatus* Thunberg, Nov. Ins. Sp. 2:41, pl. 2, fig. 55.
- 1790 *Cimex subulatus*: Gmelin, Syst. Nat. 1. 4:2146.
- 1794 *Cimex vacca* Fabricius, Ent. Syst. 4:92. (syn. by Burmeister, 1835)
- 1794 *Cimex gazella* Fabricius, Ent. Syst. 4:92-93. (syn. by Dallas, 1851)
- 1801 *Cimex vacca*: Coquebert, Icon. Ins. 2:81, pl. 19 fig. 2.

- 1803 *Edessa gazella*: Fabricius, Syst. Rh. :147. (Dn)
- 1803 *Edessa vacca*: Fabricius, Syst. Rh. :147. (Dn)
- 1806 *Pentatoma mucronata* Palisot de Beauvois, Ins. Afr. Am. :46, pl. 6 fig. 5, 6. (syn. by Stål, 1865)
- 1825 *Pentatoma mucronata*: Lepeletier & Serville Enc. Meth. 10:55. (D)
- 1834 *Edessa vacca*: Burmeister, Silb. Rev. Ent. 2:22, fig. 5. (antenna)
- 1835 *Edessa vacca*: Burmeister, Handb. Ent. 2:356. (S, Dn)
- 1843 *Piezosternum mucronatum*: Amyot & Serville, Hist. Nat. Ins. Hem.:162. (S, D)
- 1848 *Edessa vacca*: Erichson, Reise Guiana 3:610. (R)
- 1851 *Piezosternum mucronatum*: Herrich-Schäffer, Wanz. Ins. 9:310. (Africa in error)
- 1851 *Piezosternum mucronatum*: Dallas, List. Hem. 1:338. (misdet. see *Piezosternum calidum*)
- 1851 *Piezosternum subulatum*: Dallas, List. Hem. 1:338. (S)
- 1857 *Pentatoma (Edessa) vacca*: Guérin-Ménéville, Hist. Cuba Ins. :375. (Dn, S, R)
- 1859 *Piezosternum mucronatum*: Dohrn, Cat. Hem. :20. (S)
- 1859 *Piezosternum subulatum*: Dohrn, Cat. Hem. :20. (S)
- 1865 *Piezosternum subulatum*: Stål, Hem. Afr. 1:228. (S)
- 1868 *Piezosternum subulatum*: Stål, Sv. Vet. Akad. Handl. 7(11):40. (S, R, T)
- 1868 *Piezosternum mucronatum*: Walker, Cat. Het. 3:457. (misdet. see *Piezosternum calidum*)
- 1868 *Piezosternum subulatum*: Walker, Cat. Het. 3:457. (R)
- 1868 *Piezosternum retractum* Walker, Cat. Het. 3:457-458. (syn. by Distant, 1900)
- 1868 *Salica excellens* Walker, Cat. Het. 3:469. (syn. by Distant, 1900)
- 1870 *Piezosternum subulatum*: Stål, Sv. Vet. Akad. Handl. 9(1):64. (S, R)
- 1870 *Piezosternum excellens*: Stål, Sv. Vet. Akad. Handl. 9(1):64. (S, R)
- 1873 *Piezosternum excellens*: Walker, Cat. Het. Suppl. :25. (S)
- 1881 *Piezosternum subulatum*: Distant, Biol. Cent. Am. Rh. 1:102. (S, R)
- 1887 *Piezosternum subulatum*: Distant, Ann. Soc. Ent. Belg. 31 c.r. (ser. 3)(88):65. (L)
- 1890 *Piezosternum subulatum*: Sharp, Trans. Ent. Soc. Lond. 1890(3):404-406, pl. 13 fig. 10. (M)
- 1890 *Piezosternum subulatum*: Distant, Biol. Cent. Am. Rh. 1:351. (R)
- 1893 *Piezosternum retractum*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
- 1893 *Piezosternum subulatum*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
- 1900 *Piezosternum subulatum*: Distant, Ann. Mag. Nat. Hist. (7)6:60, 63. (S)
- 1901 *Piezosternum subulatum*: Van Duzee, Trans. Am. Ent. Soc. 27:346. (R)
- 1903 *Piezosternum subulatum*: Kirkaldy, Entomol. 36(484):231. (Tsp, S)
- 1904 *Piezosternum subulatum*: Osborn, Ohio Nat. 5(1):197. (R)
- 1909 *Piezosternum (Piezosternum) subulatum*: Kirkaldy, Cat. Hem. 1:248. (S)
- 1923 *Piezosternum subulatum*: Barber, Am. Mus. Novit. 75:12. (L)
- 1924 *Piezosternum subulatum*: Wolcott, J. Dept. Agr. P. R. 7:254.
- 1925 *Piezosternum subulatum*: Campos, Rev. Colegio Nac. Vicente Rocafuerte 7(19-20):52 (R)
- 1932 *Piezosternum subulatum*: Barber & Bruner, J. Dept. Agr. P. R. 16(3):218. (R, Dn)
- 1936 *Piezosternum subulatum*: Wolcott, J. Agric. Univ. P. R.

- 20(1):180. (R, H)
 1939 Piezosternum subulatum: Torre-Bueno, Ent. Am. 19(4):243. (Dn)
 1939 Piezosternum subulatum: Barber, Sci. Sur. P. R. & V. I. 14(3):306-307. (S, Dn, R, H)
 1941 Piezosternum subulatum: Wolcott, J. Agric. Univ. Puerto Rico 25(2):79. (R)
 1945 Piezosternum (Piezosternum) subulatum: Blöte, Zool. Meded. 25:291. (R)
 1947 Piezosternum subulatum: Fennah, Ins. Pests Lesser Antilles 58, 166. (H)
 1949 Piezosternum subulatum: Brunner & Barber, Mem. Soc. Cubana Hist. Nat. 19(2):164. (R)
 1958 Piezosternum subulatum: Leston, Proc. 10th Int. Congr. Ent. Montreal 2:911. (C)
 1966 Piezosternum subulatum: McDonald, Quaes. Ent. 2:38, 54, figs. 367-372, 501, 502. (Ge)
 1971 Piezosternum subulatum: Pirán, Acta Zool. Lill. 26:201, 202. (R, K)
 1971 Piezosternum subulatum: Beckér & Grazia-Vieira, Iheringia (Zool.) 40:10. (R)
 1976 Piezosternum subulatum: Martorell, Food Plant Cat. 63, 76, 161, 174, 193, 206, 269.
 1981 Piezosternum subulatum: Froeschner, Smithson. Contr. Zool. 322:95. (R)
 1982 Piezosternum subulatum: Nuamah, Insect Sci. Application 3(1):15, 25.
 1984 Piezosternum subulatum: King & Saunders, Inv. Pests Crops C. Am. 124. (H)
 1988 Piezosternum subulatum: Froeschner, Cat. Het. 695. (S, R)

Distribution: Lesser Antilles (Guadeloupe I., Martinique I.) Brazil, Colombia, Cuba, Ecuador, Fr. Guiana, Guyana, Hispaniola, Mexico, Panama, Puerto Rico, Suriname, Venezuela.

Piezosternum thunbergi Stål, 1860

- 1860 Piezosternum thunbergi Stål, Sv. Vet. Akad. Handl. 2(7):28-29.
 1868 Piezosternum thunbergi: Walker, Cat. Het. 3:457. (L)
 1870 Piezosternum thunbergi: Stål, Sv. Vet. Akad. Handl. 9(1):64. (R)
 1909 Piezosternum thunbergi: Kirkaldy, Cat. Hem. 1:348. (L)
 1939 Piezosternum thunbergi: Torre-Bueno, Ent. Am. 19(4):244. (R)
 1961 Piezosternum (Piezosternum) thunbergi: Buckup, Iheringia (Zool.) 16:9. (R)
 1962 Piezosternum thunbergi: Pirán, Acta Zool. Lill. 18:10, fig. 9. (R)
 1966 Piezosternum thunbergi: Pirán, Rev. Soc. Ent. Argent. 28(1965)(1-4):87. (R)
 1971 Piezosternum thunbergi: Pirán, Acta Zool. Lill. 26:201-202. (R, K)

Distribution: Argentina, Bolivia, Brazil, Paraguay, Uruguay.

Piezosternum venezolanum Pirán, 1971

- 1971 Piezosternum venezolanum: Pirán, Acta Zool. Lill. 26:202, 204-205, fig.

Distribution: Venezuela.

Piezosternum breddini Schouteden, 1905 — see Piezosternum calidum breddini

Piezosternum cribratum Walker, 1868 — see Pygoplatys cribratus

Piezosternum excelsens (Walker, 1868) — see Piezosternum subulatum

Piezosternum firmatum Walker, 1868 — see Pygoplatys firmatus

Piezosternum ingenuum Walker, 1868 — see Pygoplatys ingenuus

Piezosternum mucronatum (Palisot de Beauvois, 1806) see Piezosternum subulatum

Piezosternum retractum Walker, 1868 see Piezosternum subulatum

Piezosternum tenebraria (Palisot de Beauvois, 1806) see Piezosternum calidum

Plisthenes Stål, 1865

Type species: Plisthenes Tessaratoma dilatata Montrouzier, 1855, by subsequent monotypy (Stål, 1867)

Merocoris: Edessa merianae (Fabricius, 1781), [= Cimex meriani Fabricius, 1781] by original designation.

1834 Merocoris Burmeister, Silb. Rev. Ent. 2:18, 19, 20. (K) (preoccup. Perty, 1833)

1846 Merocoris: Agassiz, Nomen. Zool. Hem.:12. (L)

1865 Plisthenes Stål, Hem. Afr. 1:224. (K)

1868 Plisthenes: Walker, Cat. Het. 3:475. (L)

1870 Plisthenes: Stål, Sv. Vet. Akad. Handl. 9(1):63. (S)

1893 Plisthenes: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)

1900a Plisthenes: Horváth, Term. Füzet. 23:341, 359-360. (K, D, Ks)

1909 Plisthenes: Kirkaldy, Cat. Hem. 1:XXXVI, 347. (Tsp, S)

1914 Plisthenes: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)

1955 Plisthenes: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)

1956 Plisthenes: Miller, Biol. Het., ed. 1:45. (Dn)

1957 Plisthenes: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:442. (S, K)

1971 Plisthenes: Miller, Biol. Het. 54. (Dn)

Plisthenes australis Horváth, 1900

1880 Plisthenes merianae: Distant, Trans. Ent. Soc. Lond. 1880(3):151. (part sec. Horváth, 1900)

1889 Plisthenes merianae: Distant, Ann. Mag. Nat. Hist. (6)3:272. (part sec. Horváth, 1900)

1900a Plisthenes australis Horváth, Term. Füzet. 23:360, 362-363.

1908 Plisthenes australis: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)

1909 Plisthenes australis: Kirkaldy, Cat. Hem. 1:347. (L)

1957 Plisthenes australis: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:442, 448. (T, R)

1969 Plisthenes australis: Kumar, Aust. J. Zool. 17:565, 569, fig. 55 (M, R)

Distribution: Australia (Queensland, Torres Straits).

Plisthenes buruensis Breddin, 1904

1904 Plisthenes buruensis Breddin, Wien. Ent. Ztg. 23(1):179-180, fig. 1.

1908 Plisthenes buruensis: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)

1909 Plisthenes buruensis: Kirkaldy, Cat. Hem. 1:347.

Distribution: Moluccas (Buru I.).

Plisthenes confusus Horváth, 1900

1868 Oncomerus dilatatus: Vollenhoven, Faune Ent. Indo-Neerl. 3:32. (misdet. sec. Horváth, 1900)

1880 Plisthenes merianae: Distant, Trans. Ent. Soc. Lond.

- 1880(3):151. (part sec. Horváth, 1900)
 1889 *Plisthenes merianae*: Distant, Ann. Mag. Nat. Hist. (6)3:272. (part sec. Horváth, 1900)
 1900 *Plisthenes confusus*: Breddin, Abh. Senckenb. Naturf. Ges. 25:147. (Dn, R)
 1900a *Plisthenes confusus*: Horváth, Term. Füzet. 23:360, 361-362. (K, D, S)
 1904 *Plisthenes confusus*: Breddin, Wien. Ent. Ztg. 23(1):180, 181, fig. 2. (cf. *Plisthenes buruensis*)
 1908 *Plisthenes confusus*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Plisthenes confusus*: Kirkaldy, Cat. Hem. 1:347. (S)
 1945 *Plisthenes confusus*: Blöte, Zool. Meded. 25:290-291. (R)
Distribution: Java, Moluccas (Bachan Is., Ceram I., Halmahera I., Morotai I., Salawati I., Waigeo I.), Solomons (Obi I.).

***Plisthenes dilatatus* (Montrouzier, 1855)**

- 1855 *Tessaratomia dilatatum* Montrouzier, Ann. Soc. Agron. Lyon (2)7(1):100.
 1867a *Plisthenes dilatatus*: Stål, Berl. Ent. Z. 10:157. (L)
 1868 *Oncomerus dilatatus*: Vollenhoven, Faune Ent. Indo-Neerl. 3:32. (misdet. see *Plisthenes confusus*)
 1868 *Plisthenes dilatatus*: Walker, Cat. Het. 3:475. (S)
 1880 *Plisthenes dilatatus*: Distant, Trans. Ent. Soc. Lond. 1880(3):151.
 1889 *Plisthenes dilatatus*: Distant, Ann. Mag. Nat. Hist. (6)3:272. (K, R)
 1893 *Plisthenes dilatatus*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a *Plisthenes dilatatus*: Horváth, Term. Füzet. 23:360, 363. (K, D, R)
 1900 *Plisthenes ventralis*: Horváth, Term. Füzet. 23:360, 364. (syn. by Distant, 1900)
 1900b *Plisthenes dilatatus*: Distant, Ann. Mag. Nat. Hist. (7)6:379-380. (S)
 1907 *Plisthenes dilatatus*: Schouteden, Ann. Soc. Ent. Belg. 51:112. (T)
 1908 *Plisthenes ventralis*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Plisthenes dilatatus*: Kirkaldy, Cat. Hem. 1:347. (S)
 1914 *Plisthenes dilatatus*: Distant, Trans. Zool. Soc. Lond. 20(11):338. (R)
 1945 *Plisthenes dilatatus*: Blöte, Zool. Meded. 25:291 (R)
Distribution: New Guinea (Goodenough I., Woodlark I.), Solomons, Sulawesi (Celebes), Tokelau (Atafu I.).

***Plisthenes merianae* (Fabricius, 1775)**

- 1775 *Cimex meriani* Fabricius, Syst. Ent. 707-708.
 1778 *Cimex meriani*: Goeze, Ent. Beytr. 2:240.
 1781 *Cimex merianae*: Fabricius, Spec. Ins. 2:350 (emendation)
 1787 *Cimex merianae*: Fabricius, Mant. Ins. 2:287. (Dn)
 1790 *Cimex merianae*: Gmelin, Syst. Nat. 1. 4:2138.
 1794 *Lygaeus merianae*: Fabricius, Ent. Syst. 4:134.
 1803 *Edessa merianae*: Fabricius, Syst. Rh. 149. (Dn)
 1834 *Merocoris merianae*: Burmeister, Silb. Rev. Ent. 2:21, fig. 5. (Tsp, Dn)
 1835 *Oncomerus* (sic) *merianae*: Burmeister, Handb. Ent. 2:353. (Dn, R)
 1838 *Oncomerus* (sic) *merianae*: Herrich-Schäffer, Wanz. Ins. 4:81-82, fig. 411.
 1840 *Oncomeris merianae*: Blanchard, Hist. Nat. Ins. 3:142. (S, D)
 1843 *Oncomerus* (sic) *merianae*: Amyot & Serville, Hist. Nat. Ins. Hem.:169. (S)
 1851 *Oncomerus* (sic) *merianae*: Herrich-Schäffer, Wanz.

Ins. 9:308. (L)

- 1859 *Oncomeris merianae*: Dohrn, Cat. Hem. 21. (L)
 1866 *Oncomeris merianae* (sic): Dohrn, Stett. Ent. Ztg. 27:323, 330, pl. 4, fig. 3.
 1868 *Oncomerus merianae*: Vollenhoven, Faune Ent. Indo-Neerl. 3:31. (S, D, R)
 1868 *Oncomerus merianae*: Walker, Cat. Het. 3:475. (S, R)
 1870 *Plisthenes merianae*: Stål, Sv. Vet. Akad. Handl. 9(1):63. (S, R)
 1873 *Plisthenes merianae*: Walker, Cat. Het. Suppl. 25. (S)
 1880 *Plisthenes merianae*: Distant, Trans. Ent. Soc. Lond. 1880(3):151. (misdet. see *Plisthenes australis* and *Plisthenes confusus*)
 1889 *Plisthenes merianae*: Distant, Ann. Mag. Nat. Hist. (6)3:272. (misdet. see *Plisthenes australis* and *Plisthenes confusus*)
 1893 *Plisthenes merianae*: Lethierry & Severin, Cat. Gen. Hem. 1:224. (S)
 1900a *Plisthenes meriani* (sic): Horváth, Term. Füzet. 23:359, 360-361. (K, D, S, R)
 1900 *Plisthenes meriani* (sic): Horváth, Zoolog. Forschungsreisen 5:633. (S, R)
 1901 *Plisthenes meriani* (sic): Breddin, Abh. Naturf. Ges. Halle 24:13. (R)
 1904 *Plisthenes merianae*: Breddin, Wien. Ent. Ztg. 23(1):181. (R)
 1905 *Plisthenes merianae*: Van Duzee, Bull. Am. Mus. Nat. Hist. 21:211. (R)
 1945 *Plisthenes meriani* (sic): Blöte, Zool. Meded. 25:291. (R)
 1957 *Plisthenes meriani* (sic): Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:448. (Australian records queried)
 1969 *Plisthenes meriani* (sic): Kumar, Aust. J. Zool. 17:565, figs. 50-54, 88.

Distribution: Australia (Queensland), Borneo, Java, Lesser Sunda Is. (Timor I.), Malay Peninsula (Malaya), Moluccas (Amboina I., Aru Is., Bachan Is., Buru I., Ceram I., Halmahera I., Misool I., Morotai I., Waigeo I.), New Guinea, Solomons (Obi I., Haruku I.), Sulawesi (Celebes), Sumatra.

***Plisthenes moluccanus* Horváth, 1900**

- 1900a *Plisthenes moluccanus*: Horváth, Term. Füzet. 23:360, 362.
 1908 *Plisthenes moluccanus*: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
 1909 *Plisthenes moluccanus*: Kirkaldy, Cat. Hem. 1:348. (L)
Distribution: Moluccas (Halmahera I.).

***Plisthenes scutellatus* Distant, 1889**

- 1889 *Plisthenes scutellatus*: Distant, Ann. Mag. Nat. Hist. (6)3:272. (K)
 1893 *Plisthenes scutellatus*: Lethierry & Severin, Cat. Gen. Hem. 1:225. (L)
 1900a *Plisthenes scutellatus*: Horváth, Term. Füzet. 23:360, 364-365. (K, D, R)
 1909 *Plisthenes scutellatus*: Kirkaldy, Cat. Hem. 1:348. (S)
 1945 *Plisthenes scutellatus*: Blöte, Zool. Meded. 25:291. (R)
Distribution: New Guinea, Solomons (Bougainville).

Plisthenes ventralis Horváth, 1900 — see *Plisthenes dilatatus*

Rhoecocoris* Bergroth, 1897 — see *Rhoecus

Rhoecocoris antennatus (Distant, 1880) — see *Musgraveia antennatus*

Rhoecocoris australasiae (Westwood, 1838) — see *Rhoecus australasiae*

Rhoecocoris sulciventris (Stål, 1863) — see Musgraveia sulciventris

Rhoecus Bergroth, 1891

Type species: Oncoscelis australasiae Westwood, 1838, by original designation.

- 1838 Oncoscelis Westwood, Trans. Ent. Soc. Lond. 2(1):19-20. (preoccupied, Dejean, 1835, emended from Onchoscelis by Agassiz, 1846)
- 1846 Oncoscelis: Agassiz, Nom. Zool. Hem.:14. (Ety)
- 1851 Oncoscelis: Dallas, List. Hem. 1:318, 346. (K)
- 1865 Oncoscelis: Stål, Hem. Afr. 1:223. (K)
- 1866 Oncoscelis: Vollenhoven, Tijdschr. Ent. (2)1:217. (cf. Dalcantha)
- 1870 Oncoscelis: Stål, Sv. Vet. Akad. Handl. 9(1):60. (S)
- 1891 Rhoecus Bergroth, Rev. Ent. 10:214. (Nn. for Oncoscelis Westwood, 1837)
- 1893 Oncoscelis: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
- 1895 Rhoecocoris Bergroth, Proc. R. Soc. Vict. 7(1894):291. (Nn. for Rhoecus Bergroth, 1891)
- 1909 Rhoecocoris: Kirkaldy, Cat. Hem. 1:345. (S)
- 1955 Rhoecocoris: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):64. (K)
- 1957 Rhoecocoris: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:439, 443. (S, K)

Note. Bergroth (1895) considered Rhoecus Bergroth, 1891, to be preoccupied by Rouc Clark, 1860. The names are similar but not identical and therefore not homonyms.

Rhoecus australasiae (Westwood, 1837) **NEW COMBINATION**

- 1837 Oncoscelis australasiae Westwood, Trans. Ent. Soc. Lond. 2:120, pl. 2 fig. 5.
- 1851 Oncoscelis australasiae: Dallas, List. Hem. 1:346. (R)
- 1859 Oncoscelis australasiae: Dohrn, Cat. Hem. :21. (L)
- 1863 Oncoscelis australasiae: Stål, Trans. Ent. Soc. Lond. (3)1:599. (cf. Musgraveia sulciventris)
- 1868 Oncoscelis australasiae: Walker, Cat. Het. 3:477. (R)
- 1870 Oncoscelis australasiae: Stål, Sv. Vet. Akad. Handl. 9(1):60. (S)
- 1893 Oncoscelis australasiae: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
- 1909 Rhoecocoris australasiae: Kirkaldy, Cat. Hem. 1:345. (S)
- 1957 Rhoecocoris australasiae: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:439, 443-445, figs. 4-6, 10-12. (D, T)
- 1969 Rhoecocoris australasiae: Kumar, Aust. J. Zool. 17:565, 569, 601, figs. 56-59, 89. (M, R)

Distribution: Australia.

Salica Walker, 1868 — see Piezosternum

Salica excellens Walker, 1868 — see Piezosternum subulatum

Stilida Stål, 1863

Type species: Stilida indecora Stål, 1863 by monotypy.

- 1863 Stilida Stål, Trans. Ent. Soc. Lond. (3)1:599.
- 1865 Stilida: Stål, Hem. Afr. 1:223. (K)
- 1868 Stilida: Walker, Cat. Het. 3:477. (S)
- 1870 Stilida: Stål, Sv. Vet. Akad. Handl. 9(1):61. (S)
- 1893 Stilida: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
- 1909 Stilida: Kirkaldy, Cat. Hem. 1:345. (S)
- 1955 Stilida: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):63.

(K)

1957 Stilida: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:440, 442, 445. (K, Ks)

1962 Stilida: Kumar, Ent. Tidskr. 83(1-2): 47-48, fig. 24. (Ge)

Stilida indecora Stål, 1863

- 1863 Stilida indecora Stål, Trans. Ent. Soc. Lond. (3)1:599.
- 1868 Stilida indecora: Walker, Cat. Het. 3:477. (R)
- 1870 Stilida indecora: Stål, Sv. Vet. Akad. Handl. 9(1):61. (Dn, R)
- 1890 Stilida indecora: Sharp, Trans. Ent. Soc. Lond. 1890(3):409, pl. 12 figs. 5, 5a, 5b. (M)
- 1893 Stilida indecora: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)
- 1901 Stilida indecora: Froggatt, Agric. Gaz. N.S.W. 12(12):1596-1597, fig. 13. (misdet. see Musgraveia sulciventris)
- 1905 Stilida indecora: Van Duzee, Bull. Amer. Mus. Nat. Hist. 21:211.
- 1907 Stilida indecora: Froggatt, Austral. Ins. :331. (S, Dn, H)
- 1909 Stilida indecora: Kirkaldy, Cat. Hem. 1:345. (S)
- 1945 Stilida indecora: Blöte, Zool. Meded. 25:286. (L)
- 1957 Stilida indecora: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:445, figs. 7-9. (K)
- 1969 Stilida indecora: Kumar, Aust. J. Zool. 17:557, 559, 560, 569, 572, 576-581, figs. 8, 21-24, 79, 95, 104-108. (M, H, B, E, I, R)
- 1970 Stilida indecora: Woodward et al., Ins. Austral. :450. (Dn)

Distribution: Australia (Queensland, N. S. Wales).

Stilida sinuata Stål, 1870

- 1870 Stilida sinuata Stål, Sv. Vet. Akad. Handl. 9(1):61.
- 1873 Stilida sinuata Walker, Cat. Het. Suppl. 25. (S)
- 1893 Stilida sinuata: Lethierry & Severin, Cat. Gen. Hem. 1:223.
- 1900 Stilida sinuata: Horváth, Zoolog. Forschungsreisen 5:632. (R)
- 1909 Stilida sinuata: Kirkaldy, Cat. Hem. 1:345. (L)
- 1957 Stilida sinuata: Leston & Scudder, Ann. Mag. Nat. Hist. (12)10:445. (K)
- 1969 Stilida sinuata: Kumar, Aust. J. Zool. 17:601. (R)
- Distribution:** Australia (Queensland, N. S. Wales, Thursday I.).

Tamolia Horváth, 1900

Type species: Tamolia ramifera (Walker, 1868) by monotypy
[= Tamolia horvathi Distant, 1900, misdet. of Lyramorpha ramifer Walker, 1868, sec. Distant, 1900]

- 1900a Tamolia Horváth, Term. Füzet. 23:341, 365. (K)
- 1908 Tamolia: Bergroth, Mem. Soc. Ent. Belg. 15:184. (L)
- 1909 Tamolia: Kirkaldy, Cat. Hem. 1:346. (L)

Tamolia ramifera (Walker, 1868)

- 1868 Lyramorpha ramifera Walker, Cat. Het. 3:376.
- 1893 Lyramorpha ramifera: Distant, Ann. Mag. Nat. Hist. (6)11:430. (cf. Lyramorpha picta)
- 1893 Lyramorpha? ramifera: Lethierry & Severin, Cat. Gen. Hem. 1:223. (L)
- 1900 Lyramorpha ramifera: Distant, Ann. Mag. Nat. Hist. (7)6:62. (Ts)
- 1900a Tamolia ramifera: Horváth, Term. Füzet. 23:365-366. (misdet. of Lyramorpha ramifer Walker, 1868, sec. Distant, 1900)
- 1900b Tamolia horvathi Distant, Ann. Mag. Nat. Hist. (7)6:379. (Nn. for Tamolia ramifera, Horváth, 1900; type of

Lynamorpha ramifer Walker, 1868; syn. by Kirkaldy, 1910)

1908 Tamolia ramifera: Bergroth, Mem. Soc. Ent. Belg. 15:184. (misdet. by Horváth, 1900)

1909 Tamolia horvathi: Kirkaldy, Cat. Hem. 1:346. (S)

1910a Tamolia ramifera: Kirkaldy, Can. Ent. 42:62-63. (D; accepts Horváth's 1900 det.)

Distribution: New Guinea.

Tamolia horvathi Distant, 1900 — Tamolia ramifera

TESSARATOMINAE

Stål, 1865a: 33.

Type genus: Tessaratomia Lepeletier & Serville, 1825

1865 Tessaratomida Stål, Hem. Afr. 1:33. (K, Kg)

1870 Tessaratomina: Stål, Sv. Vet. Akad. Handl. 9(1):65. (as div. of subfamily)

1889 Tessaratomaria: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):52. (L as division)

1900a Tessaratomaria: Horváth, Term. Füzet. 23:339. (K)

1905 Tessaratomaria: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):209, 220. (K, S)

1935 Tessaratomini: Tang, Cat. Ins. Sin. 2:362. (L)

1955 Tessaratomini: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (K)

PRIONOGASTRINI

Stål, 1870a

Type genus: Prionogaster Stål, 1853a

1870 Prionogastrina Stål, Sv. Vet. Akad. Handl. 9(1):60. (K as division)

1937 Prionogastrini: Beier, Handb. Zool. 4(2) Ins. 2:2186. (D)

1955 Prionogastrina: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (Ts)

1969a Prionogastrini: Kumar, Ann. Ent. Soc. Am. 62(4):689-691. (Ts, E, M)

Prionogaster Stål, 1853

Type species: Prionogaster westwoodi Stål, 1853 [= Amaurus serratus Germar, 1837] by monotypy.

1853 Prionogaster Stål, Öfv. Vet. Akad. Förh. 10(9):224.

1865 Prionogaster: Stål, Hem. Afr. 1:225, 231. (K, D)

1868 Prionogaster: Walker, Cal. Het. 3:484. (S)

1870 Prionogaster: Stål, Sv. Vet. Akad. Handl. 9(1):77. (S)

1893 Prionogaster: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)

1905 Prionogaster: Schouteden, Ann. Mus. Congo Zool. ser. 3, 1(2):230, 238. (K, S, D)

1909 Prionogaster: Kirkaldy, Cat. Hem. 1:358. (S)

Prionogaster serratus (Germar, 1837)

1838 Amaurus serratus Germar, Silb. Rev. Ent. 5:158.

1844 Amaurus serratus: Herrich-Schäffer, Wanz. Ins. 7:75. fig. 748. (D)

1853 Prionogaster westwoodi Stål, Öfv. Vet. Akad. Förh. 10(9):224. (syn. by Stål, 1865)

1859 Prionogaster westwoodi (sic): Dohrn, Cat. Hem. 22. (R)

1865 Prionogaster serratus: Stål, Hem. Afr. 1:231. (D, S)

1868 Prionogaster serratus: Walker, Cat. Het. 3:484. (S)

1870 Prionogaster serratus: Stål, Sv. Vet. Akad. Handl.

9(1):77. (S, R)

1893 Prionogaster serratus: Lethierry & Severin, Cat. Gen. Hem. 1:223. (S)

1905 Prionogaster serratus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):238-240, figs. 109-110, pl. 5 fig. 12. (S, D)

1909 Prionogaster serratus: Kirkaldy, Cat. Hem. 1:358. (S)

1969a Prionogaster serratus: Kumar, Ann. Ent. Soc. Am. 62(4):689-690, figs. 31-35. (D, E)

Distribution: South Africa.

Prionogaster westwoodi Stål, 1853 -- misspelling, see Prionogaster serratus

Prionogaster westwoodi Stål, 1853 -- see Prionogaster serratus

SEPININI

Horváth, 1900a

Type genus: Sepina Signoret, 1861a

1900a Sepinaria Horváth, Term. Füzet. 23:340, 366-367. (K, Kg; as division of Tessaratominae, family Pentatomidae)

1905 Sepinaria: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):210, 255-256. (K, Kg; as division of Tessaratominae, family Pentatomidae)

1955a Sepinaria: Schouteden, Mem. Soc. Ent. Belg. 27:417. (as tribe; gen. & spp. listed; as tribe of Tessaratominae, family Pentatomidae)

1955 Sepinaria: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (L, as subtribe of Tessaratomini in subfamily Tessaratominae, family Pentatomidae)

1969 Sepinaria: Kumar, Aust. J. Zool. 17:604. (classification; subtribe of Sepinini)

PLATYTATARIA

Horváth, 1900

Type genus: Platytatus Bergroth, 1892

1900a Platytataria Horváth, Term. Füzet. 23:340. (K)

1905 Platytataria: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):210, 271. (K)

1937 Platytatini: Beier, Handb. Zool. 4(2) Ins. 2:2186. (D)

1955 Platytataria: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (L, as subtribe of Tessaratomini)

Platytatus Bergroth, 1892

Type species: Platytatus ambiguus Bergroth, 1892, by monotypy

1892 Platytatus Bergroth, Ent. Mo. Mag. 28:158.

1893 Platytatus: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)

1905 Platytatus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):271-272. (S, D)

1907 Platytatus: Bergroth, Dt. Ent. Z. 1907:499. (resembles Aradidae)

1909 Platytatus: Kirkaldy, Cat. Hem. 1:361. (S)

1925 Platytatus: Bergroth, Bull. Brooklyn Ent. Soc. 20:161. (tarsal segments)

Platytatus ambiguus Bergroth, 1892

1892 Platytatus ambiguus Bergroth, Ent. Mo. Mag. 28:159.

1893 Platytatus ambiguus: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)

- 1900a Platyatus ambiguus: Horváth, Term. Füzet. 23:374. (Dn)
 1905 Platyatus ambiguus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):272-274, figs. 131, 132. (S)
 1909 Platyatus ambiguus: Kirkaldy, Cat. Hem. 1:361. (S)
 1945 Platyatus ambiguus: Blöte, Zool. Meded. 25:308. (R)
 1952 Platyatus ambiguus: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):293-394, figs. 147-149, pl. 8 fig. 2. (S. D. R)
 1969a Platyatus ambiguus: Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 53-57.

Distribution: Madagascar.

SEPINARIA

Horváth, 1900

Type genus: Sepina Signoret, 1861a

- 1900a Sepinaria Horváth, Term. Füzet. 23:340, 366-367. (K, Kg); as division of Tesseractominae, family Pentatomidae)
 1937 Sepini: Beier, Handb. Zool. 4(2)Ins. 2:2186. (D)
 1969 Sepinaria: Kumar, Aust. J. Zool. 17:604. (classification; subtribe of Sepinini)

Ipanu Schouteden, 1955

Type species: Ipanu vanderysti Schouteden, 1955, by original designation.

- 1955 Ipanu Schouteden, Mem. Soc. Ent. Belg. 27:414, 417.

Ipanu massarti Schouteden, 1955

- 1955 Ipanu massarti Schouteden, Mem. Soc. Ent. Belg. 27:415-416, 417.

Distribution: Zaire.

Ipanu schoutedeni Villers, 1967

- 1967 Ipanu schoutedeni Villiers, Bull. I.F.A.N. (ser. A) 29(4):1807-1808, figs. 14-15.

Distribution: Zaire.

Ipanu vanderysti Schouteden, 1955

- 1955 Ipanu vanderysti Schouteden, Mem. Soc. Ent. Belg. 27:414-415, 417. (spelled vanderijsti on p. 417)

Distribution: Zaire.

Malgassus Horváth, 1900

Type species: Malgassus hypoleucus Horváth, 1900, by monotypy.

- 1900a Malgassus Horváth, Term. Füzet. 23:367-368. (K)
 1905 Malgassus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):256-257. (K, Ks)
 1908 Malgassus: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 Malgassus: Kirkaldy, Cat. Hem. 1:360. (S)
 1955 Malgassus: Schouteden, Mem. Soc. Ent. Belg. 27:417. (in tribe Sepinaria)

Malgassus exiguus Horváth, 1904

- 1904 Malgassus exiguus Horváth, Ann. Mus. Natn. Hung. 2:269.
 1905 Malgassus exiguus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):257, 258-259, figs. 122-123. (K, D)
 1908 Malgassus exiguus: Bergroth, Mem. Soc. Ent. Belg.

15:185. (L)

- 1909 Malgassus exiguus: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 Malgassus exiguus: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):290, figs. 140-142, pl. 7 fig. 12. (D)
 1955 Malgassus exiguus: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)
 1969a Malgassus exiguus: Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 49-52. (M)

Distribution: Madagascar.

Malgassus hypoleucus Horváth, 1900

- 1900a Malgassus hypoleucus Horváth, Term. Füzet. 23:368.
 1905 Malgassus hypoleucus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):257-258. (K, D)
 1908 Malgassus hypoleucus: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 Malgassus hypoleucus: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 Malgassus hypoleucus: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):290. (S)
 1955 Malgassus hypoleucus: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Madagascar.

Pisena Horváth, 1900 — see Sepina

Pisena aberrans Schouteden, 1905 — see Sepina aberrans

Pisena horvathi Schouteden, 1905 — see Sepina horvathi

Pisena longirostris Horváth, 1900 see Sepina longirostris

Rhynchotmetus Horváth, 1900

Type species: Rhynchotmetus typicus Horváth, 1900, by indication.

- 1900a Rhynchotmetus Horváth, Term. Füzet. 23:367, 368-369. (K)
 1905 Rhynchotmetus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):256, 259-260. (K, D)
 1908 Rhynchotmetus: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 Rhynchotmetus: Kirkaldy, Cat. Hem. 1:360. (L)
 1955 Rhynchotmetus: Schouteden, Mem. Soc. Ent. Belg. 27:417. (in tribe Sepinaria)

Rhynchotmetus typicus Horváth, 1900

- 1900a Rhynchotmetus typicus Horváth, Term. Füzet. 23:369.
 1905 Rhynchotmetus typicus: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):260-261. (D)
 1908 Rhynchotmetus typicus: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 Rhynchotmetus typicus: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 Rhynchotmetus typicus: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):290. (S)
 1955 Rhynchotmetus typicus: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Madagascar.

Sepina Signoret, 1861

Type species: Sepina Sepina urolaboides Signoret, 1861, by monotypy.

Pisena: Pisena longirostris Horváth, 1900, by monotypy.

- 1861 Sepina Signoret, Ann. Soc. Ent. Fr. (3)8:930.
 1865 Sepina: Stål, Hem. Afr. 1:223, 226. (K, D)
 1868 Sepina: Walker, Cat. Het. 3:484. (S)
 1893 Sepina: Lethierry & Severin, Cat. Gen. Hem. 1:225. (S)
 1900a Sepina: Horváth, Term. Füzet. 23:367, 369-370. (K, D, Ks)
 1900a Pisena Horváth, Term. Füzet. 23:367, 372-373. (syn. by Bergroth, 1908)
 1905 Sepina: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):256, 261-262. (K, Ks, D)
 1905 Pisena: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):256, 266-267. (K, Ks, D)
 1908 Sepina: Bergroth, Mem. Soc. Ent. Belg. 15:185. (S)
 1909 Sepina: Kirkaldy, Cat. Hem. 1:360. (S)
 1909 Pisena: Kirkaldy, Cat. Hem. 1:360. (S)

Sepina aberrans (Schouteden, 1905)

- 1905 Pisma aberrans Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):267, 270-271.
 1908 Sepina aberrans: Bergroth, Mem. Soc. Ent. Belg. 15:185. (S)
 1909 Pisena aberrans: Kirkaldy, Cat. Hem. 1:360. (L)
 1952 Pisena aberrans: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):293. (S)
 1955 Sepina aberrans: Schouteden, Mem. Soc. Ent. Belg. 27:417. (Ts)

Distribution: Madagascar.

Sepina antennata Distant, 1913

- 1913 Sepina antennata Distant, Trans. Linn. Soc. Lond. (ser. 2) (Zoology) 16(2):145-146.

Distribution: Seychelles.

Sepina cachani Schouteden, 1955

- 1955 Sepina cachani Schouteden, Mem. Soc. Ent. Belg. 27:416-417.

Distribution: Madagascar.

Sepina conjungens Bergroth, 1906

- 1906 Sepina conjungens Bergroth, Ann. Soc. Ent. Belg. 50:197-198.
 1908 Sepina conjungens: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 Sepina conjungens: Kirkaldy, Cat. Hem. 1:360. (L)
 1952 Sepina conjungens: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):292. (S)
 1955 Sepina conjungens: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Comoros I., Madagascar.

Sepina flaviceps Horváth, 1900

- 1900a Sepina flaviceps Horváth, Term. Füzet. 23:370-371. (K)
 1905 Sepina flaviceps: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):262, 264-265, fig. 126. (K, D)
 1908 Sepina flaviceps: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
 1909 Sepina flaviceps: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 Sepina flaviceps: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):292. (S)
 1955 Sepina flaviceps: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Madagascar.

Sepina gularis Horváth, 1900

- 1900a Sepina gularis Horváth, Term. Füzet. 23:370, 371. (K)
 1905 Sepina gularis: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):262, 265-266. (K, D)

- 1908 Sepina gularis: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)

- 1909 Sepina gularis: Kirkaldy, Cat. Hem. 1:360. (S)

- 1952 Sepina gularis: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):292. (S)

- 1955 Sepina gularis: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)

Distribution: Madagascar.

Sepina horvathi (Schouteden, 1905)

- 1905 Pisena horvathi Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):267, 268-270, fig. 128, 129. (K)
 1908 Sepina horvathi: Bergroth, Mem. Soc. Ent. Belg. 15:185. (S)
 1909 Pisena horvathi: Kirkaldy, Cat. Hem. 1:360. (L)
 1952 Pisena horvathi: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):293. (S)
 1955 Sepina horvathi: Schouteden, Mem. Soc. Ent. Belg. 27:417. (Ts)

Distribution: Madagascar.

Sepina longirostris (Horváth, 1900)

- 1900a Pisena longirostris Horváth, Term. Füzet. 23:373.
 1905 Pisena longirostris: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):267-268, fig. 127. (K, D)
 1908 Sepina longirostris: Bergroth, Mem. Soc. Ent. Belg. 15:185. (S)
 1909 Pisena longirostris: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 Pisena longirostris: Cachan, Mem. Inst. Sci. Madagascar (E) 1(2):292-293, figs. 143-146, pl. 8 fig. 2. (S, D)
 1955 Sepina longirostris: Schouteden, Mem. Soc. Ent. Belg. 27:417. (Ts)
 1969a Sepina longirostris: Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 43, 44. (M)

Distribution: Madagascar.

Sepina selcheless Distant, 1909 — lapsus, see Sepina seychellensis

Sepina seychellensis Distant, 1909

- 1909b Sepina seychellensis Distant, Trans. Linn. Soc. Lond. ser. 2, (Zoology), 13(1):31-32, pl. 4 figs. 3, 3a.
 1913 Sepina seychellensis: Distant, Trans. Linn. Soc. Lond. ser. 2, (Zoology) 16(2):145. (R)
 1925 Sepina seychellensis: Singh-Pruthi, Trans. Ent. Soc. Lond. 1925(1-2):149, pl. 9 fig. 31. (Ge)
 1955 Sepina seychellensis: Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)
 1969a Sepina selcheless (sic): Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 47, 48. (M; lapsus)

Distribution: Seychelles.

Sepina urolaboides Signoret, 1861

- 1861 Sepina urolaboides Signoret, Ann. Soc. Ent. Fr. (3)8:930, 931, pl. 13 fig. 4.
 1865 Sepina urolaboides (sic): Stål, Hem. Afr. 1:226-227. (D)
 1868 Sepina urolaboides: Walker, Cat. Het. 3:484. (S)
 1893 Sepina urolaboides (sic): Lethierry & Severin, Cat. Gen. Hem. 1:225. (S)
 1900a Sepina urolaboides (sic): Horváth, Term. Füzet. 23:370, 371-372. (K, D, S)
 1905 Sepina urolaboides (sic): Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):262-263, figs. 124, 125. (K, S, D)
 1909 Sepina urolaboides: Kirkaldy, Cat. Hem. 1:360. (S)
 1952 Sepina urolaboides: Cachan, Mem. Inst. Sci.

- Madagascar (E) 1(2):290. (S)
 1955 *Sepina urolaboides* (sic): Schouteden, Mem. Soc. Ent. Belg. 27:417. (L)
 1969a *Sepina urolaboides*: Kumar, Ann. Ent. Soc. Am. 62(4):691, figs. 45, 46. (M)
Distribution: Madagascar.

TESSARATOMINI

Stål, 1865: 33.

Type genus: *Tessaratomia* Lepeletier & Serville, 1825

- 1865 *Tessaratomia* Stål, Hem. Afr. 1:33. (K, Kg)
 1955 *Tessaratomia*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (Ts)
 1970 *Tessaratomini*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):2-4. (Ts, D, K subtribes)

EUSTHENARIA

Stål, 1870a

Type genus: *Eusthenes* Laporte, 1832

- 1870 *Eusthenina* Stål, Sv. Vet. Akad. Handl. 9(1):60. (K as section)
 1889 *Eusthenaria*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):52. (D)
 1900a *Eusthenaria*: Horváth, Term. Füzet. 23:340. (K)
 1902 *Eusthenaria*: Distant, Fauna Brit. India, Rh. 1:263. (S, D, Kg)
 1905 *Eusthenaria*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):210, 230. (K, Kg)
 1935 *Eusthenini*: Tang, Cat. Ins. Sin. 2:364. (S)
 1937 *Eusthenini*: Beier, Handb. Zool. 4(2) Ins. 2:2186. (D)
 1955 *Eusthenaria*: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (Ts)
 1970 *Eusthenaria*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):4, 15-17. (K, Kg)

Anacanthopus Montandon, 1894

Type species: *Anacanthopus flavolimbatus* Montandon, 1894, by monotypy.

- 1894 *Anacanthopus* Montandon, Ann. Soc. Ent. Belg. 38(1893):639.
 1908 *Anacanthopus*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Anacanthopus*: Kirkaldy, Cat. Hem. 1:353. (L)
 1969 *Anacanthopus*: Kumar, Ann. Ent. Soc. Am. 62(4):694. (Ge)

Anacanthopus flavolimbatus Montandon, 1894

- 1894 *Anacanthopus flavolimbatus* Montandon, Ann. Soc. Ent. Belg. 38(1893):640.
 1908 *Anacanthopus flavolimbatus*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Anacanthopus flavolimbatus*: Kirkaldy, Cat. Hem. 1:353. (L)

Distribution: Philippines.

Asarcha Stål, 1870 — misspelling of *Asiarcha*

Asiarcha Stål, 1870

Type species: *Mattiphus nigradorsis* Stål, 1863, by monotypy.

- 1870 *Asiarcha* Stål, Sv. Vet. Akad. Handl. 9(1):70, 73. (K)
 1889 *Asiarcha*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):72. (D)
 1893 *Asiarcha*: Distant, Ann. Mag. Nat. Hist. (6)11:433. (cf. *Origanaus*)
 1893 *Asiarcha*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)
 1894 *Asiarcha*: Montandon, Ann. Soc. Ent. Belg. 38:639. (cf. *Anacanthopus*)
 1902 *Asiarcha*: Distant, Fauna Brit. India, Rh. 1: 263, 271. (K, D)
 1909 *Asiarcha*: Kirkaldy, Cat. Hem. 1:355. (L)
 1935 *Asiarcha*: Tang, Cat. Ins. Sin. 2:367. (S)
 1957 *Asiarcha*: Zia, Acta Ent. Sin. 7:425, 440. (K, S, D, Ks)
 1970 *Asiarcha*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 19, 30. (K, D)
 1977 *Asiarcha*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 66. (K)

Asiarcha angulosa Zia, 1957

- 1957 *Asiarcha angulosa* Zia, Acta Ent. Sin. 7:440-441, 448, figs. 33, 34, 37, 39.
 1962 *Asiarcha angulosa*: Yang, Econ. Ins. Fauna China 2:40, 43, pl. 4 fig. 29.
 1977 *Asiarcha angulosa*: Hsiao et al., Handb. Chinese Hem.-Het. 1:66, figs. 303, 304, 316, pl. 7 fig. 111. (D)
 1980 *Asiarcha angulosa*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K; syn. of *A. nigradorsis*?)
Distribution: China (Giangxi, Ghizhou, Yunnan).

Asiarcha nigradorsis (Stål, 1863)

- 1863 *Mattiphus nigradorsis* Stål, Trans. Ent. Soc. Lond. (3)1:600.
 1868 *Mattiphus nigradorsis*: Walker, Cat. Het. 3:469. (R)
 1870 *Asiarcha nigradorsis*: Stål, Sv. Vet. Akad. Handl. 9(1):73. (R)
 1873 *Asiarcha nigradorsis*: Walker, Cat. Het. Suppl. 26. (L)
 1889 *Asiarcha nigradorsis*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):72-73. (D)
 1893 *Asiarcha nigradorsis*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1902 *Asiarcha nigradorsis*: Distant, Fauna Brit. India, Rh. 1:272-273, fig. 172.
 1909 *Asiarcha nigradorsis*: Kirkaldy, Cat. Hem. 1:355. (S)
 1921 *Asiarcha nigradorsis*: Distant, Entomol. 54:(698)164. (R)
 1923 *Asiarcha nigradorsis*: Lehmann, Zool. Anz. 57(7/8):181.
 1932 *Asarcha* (sic) *nigradorsis*: Wu, Mar. Biol. Assoc. China, 1st. Ann. Rep. :82.
 1935 *Asiarcha nigradorsis*: Hoffmann, Lingnan Univ. Sci. Bull. 7:136. (S, R)
 1935 *Asiarcha nigradorsis*: Tang, Cat. Ins. Sin. 2:367. (S, R)
 1945 *Asiarcha nigradorsis*: Blöte, Zool. Meded. 25:304. (R)
 1948 *Asiarcha nigradorsis*: Hoffmann, Lingnan Sci. J. 22(1-4):38.
 1957 *Asiarcha nigradorsis*: Zia, Acta Ent. Sin. 7:440, figs. 35, 36, 38. (K, S, D, R)
 1970 *Asiarcha nigradorsis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, 27, figs. 59-61, 106. (& Ge)
 1980 *Asiarcha nigradorsis*: Ahmad, Proc. 1st. Pakistan Congr. Zool.:135.
 1960 *Asiarcha nigradorsis*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)

Distribution: China (Fujian, Guangxi, Ghizhou, Yunnan), India (Assam, Punjab), Indo-China, Vietnam.

Asiarcha oblonga (Dallas, 1851)

- 1851 *Mattiphus oblongus* Dallas, List. Hem. 1:344.

- 1859 *Mattiphus oblongus*: Dohrn, Cat. Hem. :21. (L)
 1863 *Mattiphus oblongus*: Stål, Trans. Ent. Soc. Lond. (3)1:600 (cf. *M. nigridorsis*)
 1868 *Mattiphus oblongus*: Walker, Cat. Het. 3:468. (R)
 1868 *Pycanum pallipes* Walker, Cat. Het. 3:473. (syn. by Distant, 1893)
 1870 *Mattiphus oblongus*: Stål, Sv. Vet. Akad. Handl. 9(1):73. (L)
 1889 *Mattiphus oblongus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):71. (S, D)
 1889 *Pycanum? pallipes*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):79. (D)
 1893 *Mattiphus oblongus*: Distant, Ann. Mag. Nat. Hist. (6)11:434. (S)
 1893 *Mattiphus oblongus*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1900 *Mattiphus oblongus*: Distant, Ann. Mag. Nat. Hist. (7)6:64. (S)
 1902 *Mattiphus oblongus*: Distant, Fauna Brit. India, Rh. 1:270-271, fig. 170. (S, D, T)
 1909 *Mattiphus oblongus*: Kirkaldy, Cat. Hem. 1:355. (S)
 1935 *Mattiphus oblongus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):124-125, pl. 5 figs. 68-71. (K, S, D, R)
 1935 *Mattiphus oblongus*: Tang, Cat. Ins. Sin. 2:368. (S, R)
 1948 *Mattiphus oblongus*: Hoffmann, Lingnan Sci. J. 22(1-4):37-38. (S)
 1970 *Asiarcha oblongus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 30. (Ge)
 1980 *Mattiphus oblongus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 55, 57. (R, S, D, K)

Distribution: China (Fujian, Guizhou), India (Assam).

Aurungabada Distant, 1906

Type species: *Aurungabada singularis* Distant, 1906, by monotypy.

- 1906 *Aurungabada* Distant, Ann. Soc. Ent. Belg. 50(12):408.
 1908 *Aurungabada*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1908 *Aurungabada*: Distant, Faun. Brit. India Rh. 4(2)458-459. (D)
 1909 *Aurungabada*: Kirkaldy, Cat. Hem. 1:361. (S)
 1969 *Aurungabada*: Kumar, Ann. Ent. Soc. Am. 62(4):689, 693-694. (placed in *Eusthenaria*)

Aurungabada singularis Distant, 1906

- 1906 *Aurungabada singularis* Distant, Ann. Soc. Ent. Belg. 50(12):408-409.
 1908 *Aurungabada singularis*: Bergroth, Mem. Soc. Ent. Belg. 15:187.
 1908 *Aurungabada singularis*: Distant, Faun. Brit. India Rh. 4(2)459, fig. 270. (D)
 1909 *Aurungabada singularis*: Kirkaldy, Cat. Hem. 1:361.
 1969 *Aurungabada singularis*: Kumar, Ann. Ent. Soc. Am. 62(4):689, figs. 24, 25. (T, D)

Distribution: India (Bombay).

Candace Stål, 1870

Type species: *Pentatoma platygaster* Westwood, 1837, by monotypy.

- 1870 *Candace* Stål, Sv. Vet. Akad. Handl. 9(1):71, 76-77. (not *Candace* Dana, 1852, in error for *Candacia* Dana, 1846)
 1891 *Ectmetocara* Bergroth, Rev. Ent. 10:214. (Nn for *Candace* Stål, 1870)
 1893 *Candace*: Lethierry & Severin, Cat. Gen. Hem. 1:233.

(S)

- 1905 *Ectmetocara*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):230-231. (K, D)
 1909 *Ectmetocara*: Kirkaldy, Cat. Hem. 1:357. (S)
 1928 *Candacus* Strand, Arch. Naturg. Berlin 92(1926) A 8:47. (Nn for *Candace* Stål, 1870)
 1952a *Ectmetocara*: Villiers, Init. Afr. 9:84. (D)
 1970 *Ectmetocara*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 17, 22-23, 29-30. (K, D)

NOTE: *Candace* Dana, 1852, a misspelling, does not compete in homonymy: *Candace* Stål, 1870, is therefore the valid generic name.

Candace intermedia (Schouteden, 1905) NEW COMBINATION

- 1905 *Ectmetocara intermedia* Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):233, figs. 96-98.
 1908 *Ectmetocara intermedia*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Ectmetocara intermedia*: Kirkaldy, Cat. Hem. 1:357. (L)
 1945 *Ectmetocara intermedia*: Blöte, Zool. Meded. 25:307. (R)
 1982a *Ectmetocara intermedia*: Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Ivory Coast.

Candace platygaster (Westwood, 1837)

- 1837 *Pentatoma platygaster* Westwood, Cat. Hope 1:43.
 1865 *Dalcantha platygaster* Stål, Hem. Afr. 1:230-231. (D)
 1868 *Dalcantha platygaster*: Walker, Cat. Het. 3:474. (S)
 1870 *Candace platygaster*: Stål, Sv. Vet. Akad. Handl. 9(1):77. (S, R)
 1873 *Dalcantha platygaster*: Walker, Cat. Het. Suppl. 27. (L)
 1890 *Candace platygaster*: Distant, Ann. Soc. Ent. Belg., 34 c.r. (ser. 4)(5):54. (R)
 1893 *Candace platygaster*: Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1901c *Candace platygaster*: Distant, Proc. Zool. Soc. Lond. 1900(4):821. (S)
 1905 *Ectmetocara platygaster*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):231-232, figs. 94-95. (S, D, R)
 1909 *Ectmetocara platygaster*: Schouteden, Ann. Mus. Congo. Belge Zool. (3) 2, 1, 1:69. (R)
 1909 *Ectmetocara platygaster*: Kirkaldy, Cat. Hem. 1:357. (S)
 1912 *Candace platygaster*: Schouteden, Rev. Zool. Afr. 2(1):72. (R)
 1945 *Ectmetocara platygaster*: Blöte, Zool. Meded. 25:307. (R)
 1949 *Ectmetocara* (sic) *platygaster*: Villiers, I.F.A.N. catalogues 5:89. (R)
 1950 *Ectmetocara platygaster*?: Villiers, Bull. I.F.A.N. 12(4):938. (R)
 1952 *Ectmetocara platygaster*: Villiers, Mem. I. I.F.A.N. 14(4):1211. (R)
 1952 *Ectmetocara platygaster*: Villiers, Bull. I.F.A.N. 19:307.
 1952a *Ectmetocara platygaster*: Villiers, Init. Afr. 9:84-85, fig. 108. (Dn)
 1964 *Ectmetocara platygaster*: Schouteden, Rev. Zool. Bot. Afr. 70(1-2):95. (R)
 1970 *Ectmetocara platygaster*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):26-27, fig. 113. (Ge)
 1980 *Ectmetocara platygaster*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)

Distribution: Congo, Guinea, Ivory Coast, Liberia, Nigeria, Sierra Leone, Togo, Zaire.

Candace virescens (Distant, 1903) **NEW COMBINATION**

- 1903 *Ectmetocara virescens* Distant, Ann. Mag. Nat. Hist. (7)12:470-471.
 1905 *Ectmetocara virescens*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):233, figs. 99-100.
 1908 *Ectmetocara virescens*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Ectmetocara virescens*: Kirkaldy, Cat. Hem. 1:357. (S)
 1970 *Ectmetocara virescens*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22-23, fig. 84-85. (Ge)
 1980 *Ectmetocara virescens*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982a *Ectmetocara virescens*: Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Congo, Gabon, Guinea, Ivory Coast, Nigeria.

Candacus Strand, 1928 — see *Candace***Carpona** Dohrn, 1863

Type species: *Carpona funesta* Dohrn, 1863, by monotypy.

Virbius: *Virbius imperiale* [= *Pycanum imperiale* Dohrn, 1863] designated by Kirkaldy, 1909.

- 1863 *Carpona* Dohrn, Stett. Ent. Ztg. 24:351.
 1865 *Virbius* Stål, Hem. Afr. 1:225. (K) (syn. by Stål, 1870)
 1868 *Carpona*: Walker, Cat. Het. 3:474. (L)
 1870 *Carpona*: Stål, Sv. Vet. Akad. Handl. 9(1):70, 74. (K, S)
 1889 *Carpona*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):73. (S, D)
 1893 *Carpona*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1902 *Carpona*: Distant, Fauna Brit. India, Rh. 1: 263, 273. (K, S, D)
 1909 *Carpona*: Kirkaldy, Cat. Hem. 1:XXXVI, 355. (Tsp, S)
 1956 *Carpona*: Miller, Biol. Het. ed. 1:45. (Dn)
 1957 *Carpona*: Zia, Acta Ent. Sin. 7:425, 444. (K, S, D)
 1970 *Carpona*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 19, 30. (K, D)
 1971 *Carpona*: Miller, Biol. Het. 54. (Dn)
 1977 *Carpona*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 66-67. (K, Ks)

Carpona amplicollis (Stål, 1863)

- 1863 *Pycanum amplicolle* Stål, Trans. Ent. Soc. Lond. (3)1:600-601.
 1868 *Pycanum amplicolle*: Walker, Cat. Het. 3:370. (R)
 1870 *Carpona amplicollis*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (L)
 1873 *Carpona amplicollis*: Walker, Cat. Het. Suppl. 27. (L)
 1889 *Carpona amplicollis*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):74. (S, D)
 1893 *Carpona amplicollis*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1902 *Carpona amplicollis*: Distant, Fauna Brit. India, Rh. 1: 273, fig. 173. (D, R)
 1909 *Carpona amplicollis*: Kirkaldy, Cat. Hem. 1:355. (S)
 1921 *Carpona amplicollis*: Distant, Entomol. 54:(698)164. (R)
 1935 *Carpona amplicollis*: Hoffmann, Lingnan Univ. Sci. Bull. 7:136. (S)
 1957 *Carpona amplicollis*: Zia, Acta Ent. Sin. 7:444-445, fig. 42. (S, D, R)
 1970 *Carpona amplicollis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, fig. 64. (& Ge)
 1977 *Carpona amplicollis*: Hsiao et al., Handb. Chinese Hem.-Het. 1:66, figs. 306, 314, pl. 7 fig. 112. (K)

- 1980 *Carpona amplicollis*: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)

Distribution: China (Guangxi, Yunnan), India (Assam), Indo-China.

Carpona amyoti (Vollenhoven, 1866)

- 1866 *Dalcantha amyoti* Vollenhoven, Tijdschr. Ent. (2)1:219, pl. 11 fig. 7.
 1868 *Pycanum amyoti*: Vollenhoven, Faune Ent. Indo-Neerl. 3:34, pl. 3 figs. 8, 8a. (misdet., see *Carpona vollenhoveni*)
 1868 *Pycanum amyoti*: Walker, Cat. Het. 3:471. (L)
 1870 *Carpona amyoti*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (S)
 1873 *Carpona amyoti*: Walker, Cat. Het. Suppl. 27. (possibly var. of *C. amplicollis*)
 1889 *Carpona amyoti*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):74-75. (S, D)
 1893 *Carpona amyoti*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1909 *Carpona amyoti*: Kirkaldy, Cat. Hem. 1:356, 374. (S)
 1907a *Carpona amyoti*: Schouteden, Notes Leyden Mus. 30:44. (Ts)
 1945 *Carpona amyoti*: Blöte, Zool. Meded. 25:304. (T; possibly syn. of *C. amplicollis*)

Distribution: Sumatra, India?

Carpona angulata (Stål, 1863)

- 1863 *Pycanum angulatum* Stål, Trans. Ent. Soc. Lond. (3)1:601.
 1867a *Virbius angulatus*: Stål, Berl. Ent. Z. 10:158.
 1868 *Pycanum angulatum*: Walker, Cat. Het. 3:471. (L)
 1868 *Pycanum smaragdiferum* Walker, Cat. Het. 3:472-473. (syn. by Stål, 1870)
 1870 *Carpona angulata*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (S)
 1873 *Carpona angulata*: Walker, Cat. Het. Suppl. 27. (S)
 1889 *Carpona angulata*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):73. (S, D)
 1893 *Carpona angulata*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1900 *Carpona angulata*: Distant, Ann. Mag. Nat. Hist. (7)6:64. (R)
 1909 *Carpona angulata*: Kirkaldy, Cat. Hem. 1:356. (S)
 1921 *Carpona angulata*: Distant, Entomol. 54:(698)164. (R)
 1935 *Carpona angulata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137. (S)
 1945 *Carpona angulata*: Blöte, Zool. Meded. 25:304. (R)
Distribution: Indo-China, Laos, Thailand.

Carpona funesta Dohrn, 1863

- 1863 *Carpona funesta* Dohrn, Stett. Ent. Ztg. 24:351-352.
 1868 *Carpona funesta*: Walker, Cat. Het. 3:474. (L)
 1870 *Carpona funesta*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (D)
 1889 *Carpona funesta*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):73-74. (S, D)
 1893 *Carpona funesta*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1909 *Carpona funesta*: Kirkaldy, Cat. Hem. 1:356. (S)
 1935 *Carpona funesta*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137. (S)

Distribution: Cambodia, Indo-China.

Carpona imperialis (Dohrn, 1863)

- 1863 *Pycanum ? imperiale* Dohrn, Stett. Ent. Ztg. 24:352-353.
 1867a *Virbius imperialis*: Stål, Berl. Ent. Z. 10:158. (Ts)

- 1868 *Pycanum imperiale*: Walker, Cat. Het. 3:471. (L)
 1870 *Carpona imperialis*: Stål, Sv. Vet. Akad. Handl. 9(1):74. (K, R)
 1871 *Carpona imperialis*: Stål, Öfv. Vet. Akad. Förh. 27(7):644. (Dn)
 1873 *Carpona imperialis*: Walker, Cat. Het. Suppl. 27. (L)
 1893 *Carpona imperialis*: Lethierry & Severin, Cat. Gen. Hem. 1:231.
 1909 *Carpona imperialis*: Kirkaldy, Cat. Hem. 1:356. (S)
 1945 *Carpona imperialis*: Blöte, Zool. Meded. 25:304. (R)
 1956 *Carpona imperialis*: Miller, Biol. Het. ed. 1: pl. 1, fig. 13. (fig. only)
 1970 *Carpona imperialis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, 27, figs. 62-63, 107. (& Ge)
 1971 *Carpona imperialis*: Miller, Biol. Het. :pl. 1 fig. 13. (figure only)

Distribution: Philippines (Luzon).

Carpona stabilis (Walker, 1868)

- 1868 *Pycanum stabile* Walker, Cat. Het. 3:472.
 1889 *Pycanum? stabile*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):77-79. (D)
 1893 *Carpona stabile*: Distant, Ann. Mag. Nat. Hist. (6)11:434. (Ts, T)
 1893 *Carpona stabilis*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1900 *Carpona stabilis*: Distant, Ann. Mag. Nat. Hist. (7)6:63. (Ts)
 1902 *Carpona stabilis*: Distant, Fauna Brit. India, Rh. 1:274. (S, D)
 1909 *Carpona stabilis*: Kirkaldy, Cat. Hem. 1:356. (S)
 1977 *Carpona stabilis*: Hsiao et al., Handb. Chinese Hem.-Het. 1:67, fig. 307, 313, pl. 7 fig. 113.
 1980 *Carpona stabilis*: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)

Distribution: China (Yunnan), India.

Carpona vollenhovi Blöte, 1945

- 1868 *Pycanum amyoti*: Vollenhoven, Faune Ent. Indo-Neerl. 3:34. pl. 3, figs. 8, 8a. (misdet., sec Blöte, 1945)
 1945 *Carpona vollenhovi* Blöte, Zool. Meded. 25:304-305.

Distribution: Sumatra?

Dalcantha Amyot & Serville, 1843

Type species: *Dalcantha dilatata* Amyot & Serville, 1843a, by monotypy.

- 1843 *Dalcantha* Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 170-171.
 1846 *Dalcantha*: Agassiz, Nomen. Zool. Hem. Add. 4. (Ety)
 1851 *Dalcantha*: Dallas, List. Hem. 1:318, 345. (K)
 1851 *Dalcantha*: Herrich-Schäffer, Wanz. Ins. 9:283, 308. (K, L)
 1865 *Dalcantha*: Stål, Hem. Afr. 1:225, 230. (K, D)
 1866 *Dalcantha*: Vollenhoven, Tijdschr. Ent. (2)1:215, 217. (D)
 1868 *Dalcantha*: Walker, Cat. Het. 3:473. (L)
 1870 *Dalcantha*: Stål, Sv. Vet. Akad. Handl. 9(1):71, 76. (K, S)
 1889 *Dalcantha*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):80. (S, D)
 1893 *Dalcantha*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1902 *Dalcantha*: Distant, Fauna Brit. India, Rh. 1:263, 275-276. (K, S, D)
 1903 *Dalcantha*: Kirkaldy, Entomol. 36(484):231. (Tsp)

- 1909 *Dalcantha*: Kirkaldy, Cat. Hem. 1:357. (L)
 1935 *Dalcantha*: Tang, Cat. Ins. Sin. 2:368. (S)
 1970 *Dalcantha*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 17-18, 29. (K, D)

Dalcantha alata Breddin, 1904

- 1904 *Dalcantha alata* Breddin, Wien. Ent. Ztg. 23(8):18.
 1908 *Dalcantha alata*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Dalcantha alata*: Kirkaldy, Cat. Hem. 1:357. (L)
 1921 *Dalcantha alata*: Distant, Entomol. 54:(698)164. (R)
 1932 *Dalcantha alata*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 *Dalcantha alata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137. (S)
 1935 *Dalcantha alata*: Tang, Cat. Ins. Sin. 2:368. (S)
 1945 *Dalcantha alata*: Blöte, Zool. Meded. 25:307. (R)
 1971 *Dalcantha alata*: Gaedike, Beitr. 21(1-2):79. (T)

Distribution: Indo-China, Laos, Vietnam.

Dalcantha amyoti Vollenhoven, 1866 — see *Carpona amyoti*

Dalcantha angularis Breddin, 1904

- 1904 *Dalcantha angularis* Breddin, Wien. Ent. Ztg. 23(8):18.
 1908 *Dalcantha angularis*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Dalcantha angularis*: Kirkaldy, Cat. Hem. 1:357. (L)
 1915 *Dalcantha angularis*: Distant, Sarawak Mus. J. 2(pt.2)(6):179-180. (D)
 1928 *Dalcantha angularis*: China, J.F.M.S. Mus. 8:193. (R)
 1945 *Dalcantha angularis*: Blöte, Zool. Meded. 25:307. (R)
 1971 *Dalcantha angularis*: Gaedike, Beitr. Ent. 21(1-2):79. (T)

Distribution: Borneo, Sumatra.

Dalcantha dilatata Amyot & Serville, 1843

- 1843 *Dalcantha dilatata* Amyot & Serville, Hist. Nat. Ins. Hem.:171.
 1851 *Dalcantha dilatata*: Dallas, List. Hem. 1:345. (R)
 1859 *Dalcantha dilatata*: Dohrn, Cat. Hem. :21. (L)
 1863 *Dalcantha dilatata*: Stål, Trans. Ent. Soc. Lond. (3)1:600. (cf. *D. inermipes*)
 1868 *Dalcantha dilatata*: Walker, Cat. Het. 3:473. (R)
 1868 *Dalcantha regia* Walker, Cat. Het. 3:474. (syn. with *D. stali* by Stål, 1870; disputed by Distant, 1900)
 1870 *Dalcantha dilatata*: Stål, Sv. Vet. Akad. Handl. 9(1):76. (S)
 1889 *Dalcantha dilatata*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):81. (S, D)
 1893 *Dalcantha dilatata*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1900 *Dalcantha dilatata*: Distant, Ann. Mag. Nat. Hist. (7)6:61-62, 63. (S)
 1902 *Dalcantha dilatata*: Distant, Fauna Brit. India, Rh. 1:276, fig. 175. (S, D)
 1903 *Dalcantha dilatata*: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 *Dalcantha dilatata*: Kirkaldy, Cat. Hem. 1:357.
 1919 *Dalcantha dilatata*: Paiva, Rec. Indian Mus. 16:354. (R)
 1970 *Dalcantha dilatata*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):17-18, 29, figs. 56-58. (& Ge)
 1990 *Dalcantha dilatata*: Zheng & Jin, Contr. Shanghai Inst. Ent. 9:142. (R)

Distribution: India (Assam).

Dalcantha inermipes Stål, 1863

- 1863 *Dalcantha inermipes* Stål, Trans. Ent. Soc. Lond. (3)1:599-600.

- 1868 Dalcantha inermipes: Walker, Cat. Het. 3:473. (R)
 1870 Dalcantha inermipes: Stål, Sv. Vet. Akad. Handl. 9(1):76. (L)
 1889 Dalcantha inermipes: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):81-82.
 1893 Dalcantha inermipes: Lethierry & Severin, Cat. Gen. Hem. 1:233.
 1902 Dalcantha inermipes: Distant, Fauna Brit. India, Rh. 1:276. (S, D)
 1909 Dalcantha inermipes: Kirkaldy, Cat. Hem. 1:357. (S)
 1980 Dalcantha inermipes (sic): Ahmad, Proc. 1st Pakistan Congr. Zool.:135.

Distribution: India (Assam, Punjab).

Dalcantha platygaster Westwood, 1837 — see Candace platygaster

Dalcantha regia Walker, 1868 — see Dalcantha dilatata & D. stali

Dalcantha sanctifargavii Vollenhoven, 1866 — see Pycanum ponderosum

Dalcantha servillei Vollenhoven, 1866 — see Pseudopycanum nigromarginatum

Dalcantha stali Vollenhoven, 1866

- 1866 Dalcantha stali Vollenhoven, Tijdschr. Ent. (2)1:220-221, pl. 11 fig. 8.
 1868 Dalcantha regia Walker, Cat. Het. 3:474. (syn. by Stål, 1870 disputed by Distant, 1900)
 1870 Dalcantha stali: Stål, Sv. Vet. Akad. Handl. 9(1):76. (S, R)
 1873 Dalcantha stali: Walker, Cat. Het. Suppl. 27. (S)
 1889 Dalcantha stali: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):81. (S, D)
 1893 Dalcantha stali (sic): Lethierry & Severin, Cat. Gen. Hem. 1:233. (S)
 1902 Dalcantha stali: Distant, Fauna Brit. India, Rh. 1:276. (Ts?)
 1909 Dalcantha stali: Kirkaldy, Cat. Hem. 1:357. (S)
 1945 Dalcantha stali: Blöte, Zool. Meded. 25:307. (R, T)
 1970 Dalcantha stali: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):26, 27, 29, fig. 104. (& Ge)

Distribution: India (Assam).

Dalcantha westwoodii Vollenhoven, 1866 — see Sanganus westwoodii

Ectmetocara Bergroth, 1891 — see Candace

Ectmetocara (sic) platygaster (Westwood, 1837) — see Candace platygaster

Ectmetocara Bergroth, 1891 — see Candace

Ectmetocara intermedia Schouteden, 1905 — see Candace intermedia

Ectmetocara platygaster (Westwood, 1837) — see Candace platygaster

Ectmetocara virescens Distant, 1903 — see Candace virescens

Eurostus Dallas, 1851

Type species: Eurostus validus Dallas, 1851, designated by Distant, 1902.

- 1851 Eurostus Dallas, List. Hem. 1:318, 342-343. (K)

- 1865 Eurostus: Stål, Hem. Afr. 1:225. (K)
 1866 Eurostus: Vollenhoven, Tijdschr. Ent. (2)1:217. (cf. Dalcantha)
 1868 Eurostus: Walker, Cat. Het. 3:468. (L)
 1870 Eurostus: Stål, Sv. Vet. Akad. Handl. 9(1):70, 72. (K, S)
 1889 Eurostus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):69. (S, D)
 1893 Eurostus: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1894 Eurostus: Montandon, Ann. Soc. Ent. Belg. 38(1893):636. (Dn)
 1902 Eurostus: Distant, Fauna Brit. India, Rh. 1:263, 268. (K, S, D, Tsp)
 1906 Eurostus: Oshanin, Verz. Pal. Hem. 1:163. (S)
 1909 Eurostus: Kirkaldy, Cat. Hem. 1:XXXVI, 354. (Tsp, S)
 1912 Eurostus: Oshanin, Kat. Pal. Hem. :20. (Tsp)
 1935 Eurostus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 119-120. (K, D, Ksp)
 1935 Eurostus: Tang, Cat. Ins. Sin. 2:366. (S)
 1957 Eurostus: Zia, Acta Ent. Sin. 7:425, 441, 442. (K, S, D, Ks)
 1970 Eurostus: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):17, 23-24, 29. (K, M)
 1977a Eurostus: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 67-68. (K, Ks)

Eurostus grossipes Dallas, 1851

- 1851 Eurostus grossipes Dallas, List. Hem. 1:343.
 1859 Eurostus grossipes: Dohrn, Cat. Hem. :21. (L)
 1868 Eurostus grossipes: Walker, Cat. Het. 3:468. (R)
 1870 Eurostus grossipes: Stål, Sv. Vet. Akad. Handl. 9(1):72. (R)
 1879 Eurostus grossipes: Distant, Ann. Mag. Nat. Hist. (5)3:45. (R)
 1889 Eurostus grossipes: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):70. (S, D)
 1890 Eurostus grossipes: Sharp, Trans. Ent. Soc. Lond. 1890(3):404. (M)
 1893 Eurostus grossipes: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1902 Eurostus grossipes: Distant, Fauna Brit. India, Rh. 1:268-269, fig. 169. (D, R)
 1909 Eurostus grossipes: Kirkaldy, Cat. Hem. 1:354. (S)
 1935 Eurostus grossipes: Yang, Bull. Fan Mem. Inst. Biol. 6(3):120, 122, pl. 4 fig. 66. (K, S, D, R)
 1935 Eurostus grossipes: Tang, Cat. Ins. Sin. 2:366. (S, R)
 1945 Eurostus grossipes: Blöte, Zool. Meded. 25:302. (R)
 1945 Eurostus grossipes: Hoffmann, Lingnan Sci. J. 22(1-4):36. (S, R)
 1957 Eurostus grossipes: Zia, Acta Ent. Sin. 7:442, 443-444, fig. 41. (K, S, D, R)
 1962 Eurostus grossipes: Stichel, Verz. Pal. Hem. Het. 4:205. (R)
 1964 Eurostus grossipes: Sienkiewicz, Cat. Montandon Coll. :112. (R)
 1970 Eurostus grossipes: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):23-24, fig. 88. (Ge)
 1980 Eurostus grossipes: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)

Distribution: Bhutan, China (Guangdong, Guangxi, Guizhou), India (Assam, Bengal, Hindustan, Tamil Nadu (Madras), Sikkim).

Eurostus heros Breddin, 1904

- 1904 Eurostus heros Breddin, Wien. Ent. Ztg. 23(1):16-17.
 1908 Eurostus heros: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)

- 1909 Eurostus heros: Kirkaldy, Cat. Hem. 1:354. (L)
 1921 Eurostus heros: Distant, Entomol. 54:(698)164. (R)
 1932a Eurostus heros: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 Eurostus heros: Hoffmann, Lingnan Univ. Sci. Bull. 7:135. (S)
 1935 Eurostus heros: Tang, Cat. Ins. Sin. 2:366. (S)
 1945 Eurostus heros: Blöte, Zool. Meded. 25:302. (R)
 1948 Eurostus heros: Hoffmann, Lingnan Sci. J. 22(1-4):36. (S, R)
 1962 Eurostus heros: Stichel, Verz. Pal. Hem. Het. 4:205. (L)
 1970 Eurostus heros: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):24, 26, 27, 29, fig. 89, 90, 111. (& Ge)
 1971 Eurostus heros: Gaedike, Beitr. Ent. 21(1-2):87. (T)
Distribution: Indo-China, Laos, Vietnam.

Eurostus moutoni Montandon, 1894

- 1894 Eurostus moutoni Montandon, Ann. Soc. Ent. Belg. 38(1893):636-637. (syn. with E. validus Dallas, 1851, by Yang, 1935)
 1906 Eurostus moutoni: Oshanin, Verz. Pal. Hem. 1:163. (L)
 1908 Eurostus moutoni: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 Eurostus moutoni: Kirkaldy, Cat. Hem. 1:354. (L)
 1912 Eurostus moutoni: Oshanin, Kat. Pal. Hem. :20. (R)
 1932a Eurostus moutoni: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1934 Eurostus moutoni: Lindberg, Ark. Zool. 27A (28):14. (R)
 1935 Eurostus moutoni: Hoffmann, Lingnan Univ. Sci. Bull. 7:135. (S)
 1939 Eurostus moutoni: Lindberg, Notulae Ent. 18:120. (R)
 1962 Eurostus moutoni: Stichel, Verz. Pal. Hem. Het. 4:205. (as syn. of Eurostus validus)
 1964 Eurostus moutoni: Sienkiewicz, Cat. Montandon Coll. :112. (as syn. of Eurostus validus; T)

Distribution: China (Anhui, Jiangxi, Sichuan).

Eurostus ochraceus Montandon, 1894

- 1894 Eurostus ochraceus Montandon, Ann. Soc. Ent. Belg. 38(1893):638.
 1901a Eurostus ochraceus: Distant, Trans. Ent. Soc. Lond. 1901(1):103. (R)
 1902 Eurostus ochraceus: Distant, Fauna Brit. India, Rh. 1:269. (S, D, R)
 1908 Eurostus ochraceus: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 Eurostus ochraceus: Kirkaldy, Cat. Hem. 1:355. (S)
 1932a Eurostus ochraceus: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 Eurostus ochraceus: Hoffmann, Lingnan Univ. Sci. Bull. 7:135. (S)
 1935 Eurostus ochraceus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):120-121. (K, S, D)
 1935 Eurostus ochraceus: Tang, Cat. Ins. Sin. 2:367. (S, R)
 1945 Eurostus ochraceus: Blöte, Zool. Meded. 25:302. (R)
 1945 Eurostus ochraceus var. obscurus: Blöte, Zool. Meded. 25:302-303. (syn by Stichel, 1962)
 1948 Eurostus ochraceus var. obscurus: Hoffmann, Lingnan Sci. J. 22(1-4):36. (L)
 1948 Eurostus ochraceus: Hoffmann, Lingnan Sci. J. 22(1-4):36. (S)
 1957 Eurostus ochraceus: Zia, Acta Ent. Sin. 7:442, 443. (K, S, D, R)
 1962 Eurostus ochraceus: Stichel, Verz. Pal. Hem. Het. 4:205. (S, R)
 1964 Eurostus ochraceus: Sienkiewicz, Cat. Montandon

Coll. :112. (T, R)

- 1977 Eurostus ochraceus: Hsiao et al., Handb. Chinese Hem.-Het. 1:68, figs. 318, 321, pl. 7 fig. 116.
 1980 Eurostus ochraceus: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)
 1988 Eurostus ochraceus: Zhang & Lin, Ins. Mt. Namjagbarwa :84. (R)
 1989 Eurostus ochraceus: Hua, List Ins. Zhongshan Univ. :44. (L)
 1990 Eurostus ochraceus: Zheng & Jin, Contr. Shanghai Inst. Ent. 9:142. (R)

Distribution: Borneo, Burma, China (Anhui, Ghizhou, Xizang, Yunnan).

Eurostus validus Dallas, 1851

- 1851 Eurostus validus Dallas, List. Hem. 1:343, pl. 11 figs. 2a-c.
 1859 Eurostus validus: Dohrn, Cat. Hem. :21. (L)
 1868 Eurostus validus: Walker, Cat. Het. 3:468. (R)
 1870 Eurostus validus: Stål, Sv. Vet. Akad. Handl. 9(1):72. (L)
 1879 Eurostus validus: Horváth, Term. Füzet. 3(2/3):145. (R)
 1889 Eurostus validus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):69-70. (S, D)
 1893 Eurostus validus: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1906 Eurostus validus: Oshanin, Verz. Pal. Hem. 1:163. (S)
 1909 Eurostus validus: Kirkaldy, Cat. Hem. 1:355. (L)
 1910a Eurostus validus: Kirkaldy, Can. Ent. 42:62. (R, Dn)
 1912 Eurostus validus: Oshanin, Kat. Pal. Hem. :20. (R)
 1913 Eurostus validus: Matsumura, Thous. Ins. Jap., Addit. 1:119, pl. 12 fig. 24.
 1920 Eurostus validus: Sonan, Trans. Nat. Hist. Soc. Taiwan 10:126-128. (D, stridulation by only)
 1926 Eurostus validus: Esaki, Ann. Hist. Natn. Hung. 24:153. (S, R)
 1930 Eurostus validus: Matsumura, Ill. Thous. Ins. Japan 1:112, pl. 11 fig. 24. (Dn)
 1931 Eurostus validus: Matsumura, Ill. Ins. Jap. :1182, fig.
 1932a Eurostus validus: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1934 Eurostus validus: Yang, Bull. Fan Mem. Inst. Biol. 5(2):52, 54-56, fig. 4A-B. (K, D)
 1935 Eurostus validus: Hoffmann, Lingnan Univ. Sci. Bull. 7:135, 177. (S, R)
 1935 Eurostus validus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):120-121, pl. 4, fig. 61-65. (K, S, D, R.)
 1935 Eurostus validus: Tang, Cat. Ins. Sin. 2:367. (S, R)
 1945 Eurostus validus: Blöte, Zool. Meded. 25:303. (R)
 1948 Eurostus validus: Hoffmann, Lingnan Sci. J. 22(1-4):36-37. (S, R)
 1956 Eurostus validus: Miller, Biol. Het. ed. 1:28-29. (stridulation)
 1957 Eurostus validus: Zia, Acta Ent. Sin. 7:442-443, fig. 40. (K, S, D, R)
 1962 Eurostus validus: Yang, Econ. Ins. Fauna China 2:40, 42, pl. 3 fig. 24.
 1962 Eurostus validus: Stichel, Verz. Pal. Hem. Het. 4:205. (S)
 1965 Eurostus validus: Miyamoto, Spec. Bull. Lep. Soc. Jap. 1:229. (R)
 1970a Eurostus validus: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):23-24, fig. 86-87. (& Ge)
 1974 Eurostus validus: Chang, Acta Ent. Sin. 17(3):357.
 1977 Eurostus validus: Hsiao et al., Handb. Chinese Hem.-Het. 1:67, figs. 317, 320, pl. 7 fig. 115. (K)

- 1980 Eurostus validus: Chang et al., Acta Ent. Sin. 23(2):228-231.
 1980 Eurostus varidus (sic): Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)
 1985 Eurostus validus: Zhang, Econ. Ins. China 31:50-51, pl. 2, figs. 3.1-3.5. (D)
 1989 Eurostus validus: Hua, List. Ins. Zhongshan Univ. 44. (L)

Distribution: China (Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Shandong, Shanxi, Sichuan, Yunnan, Zhejiang), India, Hong Kong, Laos, Taiwan, Vietnam.

Eurostus varidus Dallas, 1851 -- misspelling, see Eurostus validus

Eurypleura Amyot & Serville, 1843

Type species: Tessaratomya bicornis Lepelletier & Serville, 1825, by monotypy.

- 1843 Eurypleura Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 169-170.
 1846 Eurypleura: Agassiz, Nomen. Zool. Hem. Add.:6. (Ety)
 1851 Eurypleura: Dallas, List. Hem. 1:318, 345. (K)
 1851 Eurypleura: Herrich-Schäffer, Wanz. Ins. 9:283, 308. (K, L)
 1866 Eurypleura: Vollenhoven, Tijdschr. Ent. (2)1:217. (cf. Dalcantha)
 1868 Eurypleura: Vollenhoven, Faune Ent. Indo-Neerl. 3:34. (D)
 1870 Eurypleura: Stål, Sv. Vet. Akad. Handl. 9(1):70, 74. (K)
 1893 Eurypleura: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)
 1903 Eurypleura: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 Eurypleura: Kirkaldy, Cat. Hem. 1:355. (L)
 1970 Eurypleura: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 18-19, 29. (K, D)

Eurypleura bicornis (Lepelletier & Serville; 1825)

- 1825 Tessaratomya bicornis Lepelletier & Serville, Enc. Meth. 10:592.
 1837 Tessaratomya bicornis: Spinola, Essai: 304. (Ts)
 1843 Eurypleura bicorne: Amyot & Serville, Hist. Nat. Ins. Hem.:170. (Dn)
 1851 Eurypleura bicornis: Dallas, List. Hem. 1:345. (S, R)
 1859 Eurypleura bicornis: Dohrn, Cat. Hem.:21. (L)
 1868 Eurypleura bicornis: Vollenhoven, Faune Ent. Indo-Neerl. 3:34-35. (S, D, R)
 1868 Eurypleura bicornis: Walker, Cat. Het. 3:476. (R)
 1870 Eurypleura bicornis: Stål, Sv. Vet. Akad. Handl. 9(1):74. (S)
 1893 Eurypleura bicornis: Lethierry & Severin, Cat. Gen. Hem. 1:231. (S)
 1900 Eurypleura bicornis: Horváth, Zoolog. Forschungsreisen 5:634. (S, R)
 1903 Eurypleura bicornis: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 Eurypleura bicornis: Kirkaldy, Cat. Hem. 1:355. (L)
 1945 Eurypleura bicornis: Blöte, Zool. Meded. 25:304. (R)
 1970 Eurypleura bicornis: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, 27, 28, 29, fig. 105. (& Ge)

Distribution: Java, Sumatra.

Eusthenes Laporte, 1833

Type species: Tessaratomya robusta Lepelletier & Severin, 1828, by monotypy.

- 1833 Dinidor subgen. Eusthenes Laporte, Mag. Zool. (Guérin-Ménéville), 2:64.
 1837 Dinidor subgen. Eusthenes Spinola, Essai: 303. (part)
 1843 Eusthenes: Amyot & Serville, Hist. Nat. Ins. Hem.: XXVIII, 167. (K, D)
 1846 Eusthenes: Agassiz, Nomen. Zool. Hem.:8. (Ety)
 1851 Eusthenes: Dallas, List. Hem. 1:317, 342. (K)
 1851 Eusthenes: Herrich-Schäffer, Wanz. Ins. 9:283-284. (K)
 1865 Eusthenes: Stål, Hem. Afr. 1:225. (K)
 1868 Eusthenes: Vollenhoven, Faune Ent. Indo-Neerl. 3:27. (D)
 1868 Eusthenes: Walker, Cat. Het. 3:467. (L)
 1870 Eusthenes: Stål, Sv. Vet. Akad. Handl. 9(1):71, 230. (K, S)
 1889 Eusthenes: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):63-64. (S, D, Ks)
 1893 Eusthenes: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1894 Eusthenes: Montandon, Ann. Soc. Ent. Belge 38:639. (cf. Anacanthopus)
 1902 Eusthenes: Distant, Fauna Brit. India Rh. 1:263, 264. (K, D)
 1906 Eusthenes: Oshanin, Verz. Pal. Hem. 1:163. (S)
 1909 Eusthenes: Kirkaldy, Cat. Hem. 1:353, 374. (S)
 1912 Eusthenes: Oshanin, Kat. Pal. Hem.:20. (Tsp)
 1935 Eusthenes: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105-107. (K, S, D, Ks)
 1935 Eusthenes: Tang, Cat. Ins. Sin. 2:364. (S)
 1957 Eusthenes: Zia, Acta Ent. Sin. 7:425, 430-431. (K, S, D, Ks)
 1970 Eusthenes: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 21-22, 29. (K, D)
 1977 Eusthenes: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 68. (K, Ks)

Eusthenes antennatus Distant, 1887 — see Eusthenes scutellaris

Eusthenes brinae Yang, 1935

- 1935 Eusthenes brinae Yang, Bull. Fan Mem. Inst. Biol. 6(3):117-118, pl. 5 figs. 80-83.
 1945 Eusthenes brinae: Blöte, Zool. Meded. 25:299. (R)
 1948 Eusthenes brinae: Hoffmann, Lingnan Sci. J. 22(1-4):32. (S, T)

Distribution: Laos, Malay Peninsula, Vietnam

Eusthenes cupreus (Westwood, 1837)

- 1837 Tessaratomya (sic) cuprea Westwood, Cat. Hope 1:27
 1851 Eusthenes cupreus: Dallas, List. Hem. 1:342. (R)
 1859 Tessaratomya cuprea: Dohrn, Cat. Hem.:21. (L)
 1859 Eusthenes cuprea: Dohrn, Cat. Hem.:21. (L)
 1860 Tessaratomya cuprea: Dohrn, Stett. Ent. Ztg. 21(7-9):401. (R)
 1863 Eusthenes cupreus: Stål, Trans. Ent. Soc. Lond. (3)1:598. (cf. E. saevus)
 1868 Eusthenes cupreus: Walker, Cat. Het. 3:467. (R)
 1870 Eusthenes cupreus: Stål, Sv. Vet. Akad. Handl. 9(1):71, 231. (S, K, D)
 1879 Eusthenes cupreus: Distant, Ann. Mag. Nat. Hist. (5)3:45. (R)
 1889 Eusthenes cupreus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 67. (S, D, R)
 1892 Eusthenes cupreus: Kirby, Linn. J. Zool. 24:87. (R)
 1893 Eusthenes cupreus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1901c Eusthenes cupreus: Distant, Proc. Zool. Soc. Lond. 1900(4):820. (S)
 1902 Eusthenes cupreus: Distant, Fauna Brit. India, Rh.

- 1:266. (S, D)
 1909 *Eusthenes cupreus*: Kirkaldy, Cat. Hem. 1:353. (S)
 1925 *Eusthenes cupreus*: China, Ann. Mag. Nat. Hist. (9)16:456-457. (R)
 1935 *Eusthenes cupreus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:132. (S, R)
 1935 *Eusthenes cupreus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):106, 107-111, pl. 1 fig. 1, pl. 2 fig. 24. (K, S, D, R)
 1935 *Eusthenes cupreus*: Tang, Cat. Ins. Sin. 2:364. (S)
 1945 *Eusthenes cupreus*: Blöte, Zool. Meded. 25:299-300. (R, T)
 1948 *Eusthenes cupreus*: Hoffmann, Lingnan Sci. J. 22(1-4):32. (S, R)
 1957 *Eusthenes cupreus*: Zia, Acta Ent. Sin. 7:431, 435, fig. 24. (K, S, D, R)
 1962 *Eusthenes cupreus*: Yang, Econ. Ins. Fauna China 2:40, 45-46.
 1962 *Eusthenes cuprea*: Stichel, Verz. Pal. Hem. Het. 4:204. (S, R)
 1964 *Eusthenes cuprea*: Sienkiewicz, Cat. Montandon Coll. :112. (R)
 1970 *Eusthenes cupreus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 27, 28, 30, figs. 77-78. (& Ge)
 1974 *Eusthenes cupreus*: Chang, Acta Ent. Sin. 17(3):356.
 1977 *Eusthenes cupreus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:69, figs. 323, 327, pl. 8 fig. 119. (K)
 1980 *Eusthenes cupreus*: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
 1985 *Eusthenes cupreus*: Zhang, Econ. Ins. China 31:51-52, figs. 116, 117, pl. 46 fig. 157.
 1987 *Eusthenes cupreus*: Zhang & Lin, Agric. Ins. Xizang 1:76. (R)
 1988 *Eusthenes cupreus*: Zhang & Lin, Ins. Mt. Namjagbarwa :84. (R)
 1989 *Eusthenes cupreus*: Hua, List Ins. Zhonshan Univ. :44. (L)
 1990 *Eusthenes cupreus*: Zheng & Jin, Contr. Shanghai Inst. Ent. 9:142. (R)
Distribution: Bhutan, Burma, China (Anhui, Fujian, Guangdong, Guangxi, Guizhou, Jiangxi, Sichuan, Xizang, Yunnan, Zhejiang), India (Assam, Sikkim), Laos, Malay Peninsula, Malaysia, Nepal, Sri Lanka, Taiwan, Thailand.

Eusthenes diomedes Breddin, 1904 — see *Eusthenes rubefactus*

Eusthenes elephas Dohrn, 1863 — see *Eusthenes robustus*

Eusthenes eurytus Distant, 1887

- 1887a *Eusthenes eurytus* Distant, Trans. Ent. Soc. Lond. 1887(3):358.
 1889 *Eusthenes eurytus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 67. (Dn)
 1890 *Eusthenes eurytus*: Sharp, Trans. Ent. Soc. Lond. 1890(3):402-403. (M)
 1893 *Eusthenes eurytus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1901a *Eusthenes eurytus*: Distant, Trans. Ent. Soc. Lond. 1901(1):103. (R)
 1902 *Eusthenes eurytus*: Distant, Fauna Brit. India, Rh. 1:265. (D)
 1903a *Eusthenes eurytus*: Distant, Fasc. Malay. Zool. 1(2):237. (R, S)
 1909 *Eusthenes eurytus*: Kirkaldy, Cat. Hem. 1:353. (S)
 1934 *Eusthenes eurytus*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):52, 59. (K) (misdet. see *Eusthenes variegatus*)
 1935 *Eusthenes eurytus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:153-154. (S, R)

- 1935 *Eusthenes eurytus*: Tang, Cat. Ins. Sin. 2:364. (as syn. of *Eusthenes cupreus*)
 1945 *Eusthenes eurytus*: Blöte, Zool. Meded. 25:300. (R)
 1962 *Eusthenes eurytus*: Stichel, Verz. Pal. Hem. Het. 4:204. (as syn. of *Eusthenes cupreus*)
 1980 *Eusthenes eurpeus* (sic): Ahmad, Proc. 1st Pakistan Congr. Zool. :135.
 1987 *Eusthenes eurytus*: Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: Burma, India (Assam, Sikkim), Malay peninsula (Malaya).

Eusthenes femoralis Zia, 1957

- 1957 *Eusthenes femoralis* Zia, Acta Ent. Sin. 7:430, 431-432, 447, figs. 12, 13. (K, D, R)
 1962 *Eusthenes femoralis*: Yang, Econ. Ins. Fauna China 2:40, 44-45, pl. 3 fig. 25.
 1974 *Eusthenes femoralis*: Chang, Acta Ent. Sin. 17(3):356.
 1977 *Eusthenes femoralis*: Hsiao et al., Handb. Chinese Hem.-Het. 1:69, pl. 8, fig. 120. (K)
 1980 *Eusthenes femoralis*: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
 1985 *Eusthenes femoralis*: Zhang, Econ. Ins. China 31:52, pl. 47 fig. 158.
 1989 *Eusthenes femoralis*: Hua, List Ins. Zhongshan Univ. :44.

Distribution: China (Fujian, Guangdong, Guangxi, Guizhou, Yunnan)

Eusthenes hercules Stål, 1870

- 1870 *Eusthenes hercules* Stål, Sv. Vet. Akad. Handl. 9(1):231.
 1873 *Eusthenes hercules*: Walker, Cat. Het. Suppl. 27. (L)
 1889 *Eusthenes hercules*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 66. (D)
 1893 *Eusthenes hercules*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1902 *Eusthenes hercules*: Distant, Fauna Brit. India, Rh. 1:264-265. (D)
 1909 *Eusthenes hercules*: Kirkaldy, Cat. Hem. 1:353. (S)
 1945 *Eusthenes hercules*: Blöte, Zool. Meded. 25:300. (R)
 1970 *Eusthenes hercules*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 30. (Ge)
 1985 *Eusthenes hercules*: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:22, fig. 53. (Dn, R)

Distribution: India (Assam), Java.

Eusthenes humeralis Distant, 1921

- 1921 *Eusthenes humeralis* Distant, Entomol. 54:(698)165.
 1932a *Eusthenes humeralis*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 *Eusthenes humeralis*: Hoffmann, Lingnan Univ. Sci. Bull. 7:132. (L)
 1948 *Eusthenes humeralis*: Hoffmann, Lingnan Sci. J. 22(1-4):33

Distribution: Vietnam

Eusthenes jason Stål, 1870

- 1868 *Eusthenes scutellaris* Vollenhoven, Faune Ent. Indo-Neerl. 3:28, pl. 3 fig. 5. (preoccup. Herrich-Schäffer, 1838)
 1870 *Eusthenes jason* Stål, Sv. Vet. Akad. Handl. 9(1):232. (Nn for *Eusthenes scutellaris* Vollenhoven, 1868)
 1873 *Eusthenes jason* Walker, Cat. Het. Suppl. 27. (S)
 1893 *Eusthenes jason*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1907a *Eusthenes jason*: Schouteden, Notes Leyden Mus. 30:44. (S)

- 1909 Eusthenes jason: Kirkaldy, Cat. Hem. 1:353. (S)
 1945 Eusthenes jason: Blöte, Zool. Meded. 25:300. (R, T)
Distribution: N. India, Java.

Eusthenes laticollis Westwood, 1837 — see Mattiphus laticollis

Eusthenes minor Vollenhoven, 1868 — see Eusthenes scutellaris

Eusthenes paris Breddin, 1899

- 1899 Eusthenes paris Breddin, Beih. Jb. Hamb. Wiss. Anst. 16(2):167-168, fig. 4.
 1899 Eusthenes paris: Breddin, Hem. Insulae Lombok: 13-14, fig. 4. (separate)
 1908 Eusthenes paris: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 Eusthenes paris: Kirkaldy, Cat. Hem. 1:354. (L)
 1971 Eusthenes paris: Gaedike, Beitr. Ent. 21(1-2):95. (T)
Distribution: Lesser Sunda Is. (Lombok I.).

Eusthenes philoctelus China, 1925 — see Eusthenes saevus

Eusthenes polyphemus Stål, 1863

- 1863 Eusthenes polyphemus Stål, Trans. Ent. Soc. Lond. (3)1:598.
 1868 Eusthenes polyphemus: Walker, Cat. Het. 3:468. (R)
 1870 Eusthenes polyphemus: Stål, Sv. Vet. Akad. Handl. 9(1):72, 232. (K, Dn)
 1889 Eusthenes polyphemus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 68. (S, D)
 1893 Eusthenes polyphemus: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1901a Eusthenes polyphemus: Distant, Trans. Ent. Soc. Lond. 1901(1):103. (R)
 1902 Eusthenes polyphemus: Distant, Fauna Brit. India, Rh. 1:265-266. (S, D, R)
 1909 Eusthenes polyphemus: Kirkaldy, Cat. Hem. 1:354. (S)
 1945 Eusthenes polyphemus: Blöte, Zool. Meded. 25:300. (R)

Distribution: Burma, India (Assam, Sikkim); Vietnam.

Eusthenes pratti Distant, 1890

- 1890a Eusthenes pratti Distant, Entomol. 23(324):160 (syn. with Eusthenes validus Dallas, 1851, by Yang, 1935)
 1890 Eusthenes pratti: Sharp, Trans. Ent. Soc. Lond. 1890(3):403-404, pl. 12 fig. 4. (M)
 1893 Eusthenes pratti: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1899 Eusthenes pratti: Sharp, Cambridge Nat. Hist. 6:533, fig. 255 A, B. (figs. only)
 1909 Eusthenes pratti: Kirkaldy, Cat. Hem. 1:354. (S)
 1925 Eusthenes pratti: Singh-Pruthi, Trans. Ent. Soc. Lond. 1925(1-2):149, pl. 9 fig. 30. (Ge)
 1932a Eusthenes pratti: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1935 Eusthenes pratti: Hoffmann, Lingnan Univ. Sci. Bull. 7:133. (S)
 1935 Eusthenes pratti: Yang, Bull. Fan Mem. Inst. Biol. 6(3):120. (as syn. of Eurostus validus Dallas, 1851)
 1962 Eusthenes pratti: Stichel, Verz. Pal. Hem. Het. 4:205. (as syn. of Eurostus validus)

Distribution: China (Jiangxi).

Eusthenes reflexus Dallas, 1857 — see Mattiphus reflexus

Eusthenes robustus (Lepelletier & Serville, 1825)

- 1825 Tessaratomia robusta Lepelletier & Serville Enc. Meth. 10:591.

- 1833 Dinidor (Eusthenes) robustus: Laporte, Mag. Zool. (Guérin), 2:64. (Tsp)
 1837 Dinidor robustus: Spinola, Essai :304. (Ts)
 1840 Eusthenes robustus: Blanchard, Hist. Nat. Ins. 3:142. (D)
 1843 Eusthenes robustus: Amyot & Serville, Hist. Nat. Ins. Hem.:167. (S, D)
 1851 Eusthenes robustus: Herrich-Schäffer, Wanz. Ins. 9:309. (cf. E. scutellaris)
 1851 Eusthenes robustus: Dallas, List. Hem. 1:342. (S, R)
 1859 Eusthenes robustus: Dohrn, Cat. Hem. :21. (L)
 1863 Eusthenes elephas Dohrn, Stett. Ent. Ztg. 24:351. (syn. by Vollenhoven, 1868)
 1863 Eusthenes robustus: Stål, Trans. Ent. Soc. Lond. (3)1:598. (cf. Eusthenes saevus)
 1868 Eusthenes robustus: Vollenhoven, Faune Ent. Indo-Neerl. 3:27-28. (S, D)
 1868 Eusthenes robustus: Walker, Cat. Het. 3:468. (R)
 1868 Eusthenes elephas: Walker, Cat. Het. 3:468. (R)
 1870 Eusthenes robustus: Stål, Sv. Vet. Akad. Handl. 9(1):71, 230. (S, K, D)
 1873 Eusthenes robustus: Walker, Cat. Het. Suppl. 26. (S)
 1879 Eusthenes robustus: Distant, Ann. Mag. Nat. Hist. (5)3:45. (R)
 1889 Eusthenes robustus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64-65. (S, D)
 1893 Eusthenes robustus: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
 1900a Eusthenes robustus: Breddin, Abh. Senckenb. Naturf. Ges. 25:148. (R)
 1900 Eusthenes robustus: Horváth, Zoolog. Forschungsreisen 5:633. (S, R)
 1901 Eusthenes robustus: Breddin, Abh. Naturf. Ges. Halle 24:14, 63. (Dn, R)
 1902 Eusthenes robustus: Distant, Fauna Brit. India, Rh. 1:264, fig. 168. (S, D, R)
 1905 Eusthenes robustus: Breddin, Mitt. Nat. Mus. Hamb. 22:115. (R)
 1909 Eusthenes robustus: Kirkaldy, Cat. Hem. 1:354. (S)
 1910 Eusthenes robustus: Kirkaldy, Ann. Soc. Ent. Belg. 54(4):111. (R)
 1921 Eusthenes robustus: Distant, Entomol. 54:(698)164. (R)
 1928 Eusthenes robustus: China, J.F.M.S. Mus. 8:193. (R)
 1932a Eusthenes robustus: Hoffmann, J. Pan-Pac. Res. Inst. 7(1) 10. (L)
 1932 Eusthenes robustus: Wu, Mar. Biol. Assoc. China, 1st. Ann. Rep. :82. (R; authorship attributed to Distant in error)
 1933 Eusthenes robustus: Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51. (R)
 1934 Eusthenes robustus: Miller, J. F. M. S. Mus. 17(3):514-515, figs. 11, 30. (E, N)
 1935 Eusthenes robustus: Hoffmann, Lingnan Univ. Sci. Bull. 7:133. (S, R)
 1935 Eusthenes robustus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):106, 115-117, pl. 3 figs. 34-44. (part)
 1935 Eusthenes robustus: Tang, Cat. Ins. Sin. 2:364-365. (S, part)
 1945 Eusthenes robustus: Blöte, Zool. Meded. 25:300. (R)
 1948 Eusthenes robustus: Hoffmann, Lingnan Sci. J. 22:33. (S, R)
 1956 Eusthenes robustus: Miller, Biol. Het. ed. 1:32, fig. 9.3. (P, I)
 1957 Eusthenes robustus: Zia, Acta Ent. Sin. 7:431, 433-434, figs. 14, 20. (K, S, D, R)
 1959 Eusthenes robustus: Scudder, Trans. Ent. Soc. Lond. 111(14):413. (Ge)

- 1962 Eusthenes robustus: Yang, Econ. Ins. Fauna China 2:40, 45.
 1962 Eusthenes robustus: Stichel, Verz. Pal. Hem. Het. 4:204. (S, R)
 1964 Eusthenes robustus: Sienkiewicz, Cat. Montandon Coll. :112. (R)
 1968 Eusthenes robustus: Cobben, Evol. Trends Het. Eggs: 114-115. (E)
 1970 Eusthenes robustus: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):21-22, figs. 74-76. (Ge)
 1974 Eusthenes robustus: Chang, Acta Ent. Sin. 17(3):356. (R)
 1977 Eusthenes robustus: Hsiao et al., Handb. Chinese Hem.-Het. 1:68-69, figs. 326, pl. 8 fig. 118.
 1980 Eusthenes robustus: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
 1981 Eusthenes robustus: Hinton, Biol. Ins. Eggs. 1:594. (E)
 1985 Eusthenes robustum: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:22, fig. 54. (Dn, R)
 1985 Eusthenes robustus: Zhang, Econ. Ins. China 31:53, figs. 114, 115, pl. 41 fig. 116. (D)
 1989 Eusthenes robustus: Hua, List Ins. Zhongshan Univ. 44. (L)

Distribution: Bhutan, Borneo, China (Fujian, Guangdong, Guangxi, Guizhou, Hainan I., Jiangxi, Sichuan, Yunnan) E. Indies, India (Assam, Bengal, Sikkim), Indo-China, Java, Macao, Malay Peninsula, Sumatra, Suwalesi (Celebes), Thailand, Vietnam.

Note: Yang (1935) synonymized Eusthenes jason Stal, 1870; Eusthenes polyphemus Stal, 1863; and Eusthenes touchei Fallou, 1887; and tentatively synonymized Eusthenes hercules Stal, 1870; Eusthenes humeralis Distant, 1921; Eusthenes rubefactus Distant, 1901; and Eusthenes thoracicus Distant, 1900 with Eusthenes robustus (Lepeletier & Serville, 1828). Only Tang (1935), as a cataloger, has followed this synonymy.

Eusthenes rubefactus Distant, 1901

- 1901a Eusthenes rubefactus Distant, Trans. Ent. Soc. Lond. 1901(1):111.
 1902 Eusthenes rubefactus: Distant, Fauna Brit. India, Rh. 1:267. (D)
 1904 Eusthenes diomedes Breddin, Wien. Ent. Ztg. 23(1):15-16. (syn. by Distant, 1921)
 1908 Eusthenes diomedes: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1908 Eusthenes rubefactus: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 Eusthenes diomedes: Kirkaldy, Cat. Hem. 1:353. (L)
 1909 Eusthenes rubefactus: Kirkaldy, Cat. Hem. 1:354. (S)
 1919 Eusthenes rubefactus: Paiva, Rec. Indian Mus. 16(5):354. (R)
 1921 Eusthenes rubefactus: Distant, Entomol. 54:(698)165. (S, R)
 1926 Eusthenes rubefactus: Esaki, Ann. Hist. Natn. Hung. 24:153. (S, R)
 1932 Eusthenes diomedes: Hoffmann, J. Pan-Pac. Res. Inst. 7:10. (L)
 1935 Eusthenes rubefactus: Hoffmann, Lingnan Univ. Sci. Bull. 7:133-134. (S, R)
 1935 Eusthenes rubefactus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):116. (as syn. of Eusthenes robustus)
 1945 Eusthenes rubefactus: Blöte, Zool. Meded. 25:300. (R)
 1948 Eusthenes rubefactus: Hoffmann, Lingnan Sci. J. 22(1-4):33-34.
 1971 Eusthenes diomedes: Gaedike, Beitr. Ent. 21(1-2):84.

(T)

- 1980 Eusthenes diomedes: Chen, Ghizhou Agric. Sci. 1980(3):53, 56, 57. (R, D, K)

Distribution: Myanmar, India (Assam), Indo-China, Taiwan, Vietnam.

Eusthenes saevus Stal, 1863

- 1863 Eusthenes saevus Stal, Trans. Ent. Soc. Lond. (3)1:597-598.
 1868 Eusthenes saevus: Walker, Cat. Het. 3:468. (R)
 1870 Eusthenes saevus: Stal, Sv. Vet. Akad. Handl. 9(1):72
 1879 Eusthenes saevus: Horváth, Term. Füzet. 3(2/3):145. (R)
 1889 Eusthenes saevus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 68. (S, D, R)
 1893 Eusthenes saevus: Lethierry & Severin, Cat. Gen. Hem. 1:230.
 1902 Eusthenes saevus: Distant, Fauna Brit. India, Rh. 1:265. (D, R)
 1903a Eusthenes saevus: Distant, Fasc. Malay. Zool. 1(2):237. (S, R)
 1906 Eusthenes saevus: Oshanin, Verz. Pal. Hem. 1:163. (S)
 1909 Eusthenes saevus: Kirkaldy, Cat. Hem. 1:354. (S)
 1912 Eusthenes saevus: Oshanin, Kat. Pal. Hem. :20. (R)
 1921 Eusthenes saevus: Distant, Entomol. 54:(698)164. (R)
 1925 Eusthenes philoctetes China, Ann. Mag. Nat. Hist. (9)16:455-456, fig. 1B. (syn. by Yang, 1935)
 1932a Eusthenes saevus: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
 1934 Eusthenes saevus: Yang, Bull. Fan Mem. Inst. Biol. 5(2):52, 56-59, fig. 5. (K, D)
 1935 Eusthenes philoctetes: Hoffmann, Lingnan Univ. Sci. Bull. 7:133. (L)
 1935 Eusthenes saevus: Hoffmann, Lingnan Univ. Sci. Bull. 7:134, 177. (S, R)
 1935 Eusthenes saevus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):106, 113-114, pl. 2 fig. 25, pl. 3 fig. 33, text figs. a-f, A-C. (K, S, D, R)
 1935 Eusthenes saevus var. obsoletus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):114-115. (misspelled obsoletus on p. 114; syn. by Yang, 1935, p. 131)
 1935 Eusthenes philoctetes: Tang, Cat. Ins. Sin. 2:364. (L)
 1935 Eusthenes saevus: Tang, Cat. Ins. Sin. 2:365. (S, R)
 1945 Eusthenes saevus: Blöte, Zool. Meded. 25:300. (R)
 1948 Eusthenes saevus: Hoffmann, Lingnan Sci. J. 22(1-4):34. (S, R)
 1957 Eusthenes saevus: Zia, Acta Ent. Sin. 7:431, 432-433, figs. 16-19. (K, S, D, R)
 1962 Eusthenes saevus: Yang, Econ. Ins. Fauna China 2:40, 45.
 1962 Eusthenes philoctetes: Stichel, Verz. Pal. Hem. Het. 4:204. (S)
 1974 Eusthenes saevus: Chang, Acta Ent. Sin. 17(3):356. (R)
 1977 Eusthenes saevus: Hsiao et al., Handb. Chinese Hem.-Het. 1:68, figs. 319, 322, pl. 7 fig. 117. (K)
 1980 Eusthenes saevus: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
 1982 Eusthenes saevus: Nuamah, Insect. Sci. Application 3(1):15, 25. (C)
 1985 Eusthenes saevus: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:23, fig. 55. (Dn, R)
 1989 Eusthenes saevus: Hua, List Ins. Zhongshan Univ. :44.

Distribution: Bhutan, Borneo, China (Anhui, Guangdong, Guizhou, Jiangxi, Shanxi, Sichuan, Yangtze, Yunnan, Zhejiang) India (Assam, Sikkim), Indo-China, Malay

Penninsula.

Eusthenes saevus obsoletus Yang, 1935 — see Eusthenes saevus

Eusthenes scutellaris (Herrich-Schäffer, 1838)

- 1838 Tesseratoma (sic) scutellaris Herrich-Schäffer, Wanz. Ins. 4:81, fig. 410.
- 1868 Eusthenes minor Vollenhoven, Faune Ent. Indo-Neerl. 3:29. (syn. by Schouteden, 1907)
- 1868 Tesseratoma (sic) scutellaris: Walker, Cat. Het. 3:463. (R)
- 1870 Eusthenes scutellaris: Stål, Sv. Vet. Akad. Handl. 9(1):71, 231. (S, K, D)
- 1873 Eusthenes scutellaris: Walker, Cat. Het. Suppl. 26. (S)
- 1879 Eusthenes scutellaris: Distant, Ann. Mag. Nat. Hist. 5(3):45. (R)
- 1887a Eusthenes antennatus Distant, Trans. Ent. Soc. Lond. 1887(3):357-358. (syn. by Distant, 1902)
- 1889 Eusthenes scutellaris: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):64, 65-66. (S, D, R)
- 1889 Eusthenes antennatus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):68-69. (D)
- 1890a Eusthenes antennatus: Distant, Entomol. 23(324):160. (original description emended)
- 1893 Eusthenes antennatus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
- 1893 Eusthenes scutellaris: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
- 1900 Eusthenes scutellaris: Horváth, Zoolog. Forschungsreisen 5:634. (S, R)
- 1902 Eusthenes scutellaris: Distant, Fauna Brit. India, Rh. 1:267. (S)
- 1905 Eusthenes minor: Breddin, Mitt. Nat. Mus. Hamb. 22:116. (R)
- 1905 Eusthenes teucer Breddin, Mitt. Nat. Mus. Hamb. 22:116-117. (syn. by Blöte, 1945)
- 1907a Eusthenes scutellaris: Schouteden, Notes Leyden Mus. 30:44. (S)
- 1908 Eusthenes teucer: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 Eusthenes scutellaris: Kirkaldy, Cat. Hem. 1:354. (S)
- 1909 Eusthenes teucer: Kirkaldy, Cat. Hem. 1:354. (S)
- 1921 Eusthenes scutellaris: Distant, Entomol. 54:(598)164. (R)
- 1935 Eusthenes scutellaris: Hoffmann, Lingnan Univ. Sci. Bull. 7:134.
- 1945 Eusthenes scutellaris: Blöte, Zool. Meded. 25:300-301. (S, R, T)
- 1948 Eusthenes scutellaris: Hoffmann, Lingnan Sci. J. 22(1-4):34. (S)
- 1962 Eusthenes scutellaris: Stichel, Verz. Pal. Hem. Het. 4:204. (as syn. of Eusthenes robustus)
- 1971 Eusthenes teucer: Gaedike, Beitr. Ent. 21(1-2):101. (T)
- 1985 Eusthenes scutellaris: Datia et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:23, fig. 56.
- 1987 Eusthenes scutellaris: Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: India (Assam), Indo-China, Java, Nepal, Sri Lanka, Sumatra.

Eusthenes scutellaris Vollenhoven, 1868 — see Eusthenes jason

Eusthenes teucer Breddin, 1905 — see Eusthenes scutellaris

Eusthenes theseus Stål, 1870

- 1870 Eusthenes theseus Stål, Sv. Vet. Akad. Handl. 9(1):231.
- 1889 Eusthenes theseus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):67. (cf. Eusthenes cupreus)
- 1893 Eusthenes theseus: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
- 1902 Eusthenes theseus: Distant, Fauna Brit. India, Rh. 1:266. (cf. Eusthenes cupreus)
- 1909 Eusthenes theseus: Kirkaldy, Cat. Hem. 1:354. (S)
- 1935 Eusthenes theseus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):106, 112-113, pl. 4 fig. 52-55. ((K, S, D, R)
- 1935 Eusthenes thesus (sic): Tang, Cat. Ins. Sin. 2:365. (S, R)
- 1945 Eusthenes theseus: Blöte, Zool. Meded. 25:301. (R)
- 1948 Eusthenes theseus: Hoffmann, Lingnan Sci. J. 22(1-4):34-35. (S, R)
- 1957 Eusthenes theseus: Zia, Acta Ent. Sin. 7:431, 434-435, figs. 21-23. (K, S, D, R)
- 1962 Eusthenes theseus: Stichel, Verz. Pal. Hem. Het. 4:204. (R)
- 1964 Eusthenes theseus: Sienkiewicz, Cat. Montandon Coll. :112. (R)
- 1980 Eusthenes theseus: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)
- 1989 Eusthenes theseus: Hua, List Ins. Zhongshan Univ. :44. (L)

Distribution: China (Fujain, Guizhou, Sichuan, Xizang, Yunnan, Zhejiang) India (Sikkim, W. Bengal), Indo-China, Laos, Nepal, Taiwan, Vietnam.

Eusthenes thoracicus Distant, 1900

- 1900 Eusthenes thoracicus Distant, Ann. Mag. Nat. Hist. (7):6:61.
- 1902 Eusthenes thoracicus: Distant, Fauna Brit. India, Rh. 1:266.
- 1908 Eusthenes thoracicus: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 Eusthenes thoracicus: Kirkaldy, Cat. Hem. 1:354. (S)
- 1962 Eusthenes thoracicus: Stichel, Verz. Pal. Hem. Het. 4:204. (as syn. of Eusthenes robustus)

Distribution: India (Assam).

Eusthenes touchei Fallou, 1885

- 1885 Eusthenes touchei Fallou, Le Nat. 7:413
- 1893 Eusthenes touchei: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)
- 1892a Eusthenes touchei: Bergroth, Rev. Ent. 11:263. (Ts)
- 1894 Eusthenes touchei: Bergroth, Rev. Ent. 13:152-153. (D)
- 1909 Eusthenes touchei: Kirkaldy, Cat. Hem. 1:354. (S)
- 1923 Eusthenes touchei: Lehmann, Zool. Anz. 57(7/8):181. (R)
- 1932a Eusthenes touchei: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10.
- 1935 Eusthenes touchei: Hoffmann, Lingnan Univ. Sci. Bull. 7:134. (S)
- 1935 Eusthenes touchei: Tang, Cat. Ins. Sin. 2:365. (S)
- 1962 Eusthenes touchei: Stichel, Verz. Pal. Hem. Het. 4:204. (L)

Distribution: China (Fukien).

Eusthenes ulixes Breddin, 1899

- 1899 Eusthenes ulixes Breddin, Beih. Jb. Hamb. Wiss. Anst. 16(2):187-188, figs. 12,12a.
- 1908 Eusthenes ulixes: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 Eusthenes ulixes: Kirkaldy, Cat. Hem. 1:354. (L)
- 1928 Eusthenes ulixes: China, J.F.M.S. Mus. 8:193.
- 1932a Eusthenes ulixes: Hoffmann, J. Pan-Pac. Res. Inst.

7(1):10. (L)

1935 *Eusthenes ulixes*: Tang, Cat. Ins. Sin. 2:365. (S, R)1945 *Eusthenes ulixus* (sic): Blöte, Zool. Meded. 25:301. (R, T)1948 *Eusthenes ulixes*: Hoffmann, Lingnan Sci. J. 22(1-4):35. (R)1962 *Eusthenes ulixes*: Stichel, Verz. Pal. Hem. Het. 4:204. (L)1971 *Eusthenes ulixes*: Gaedike, Beitr. Ent. 21(1-2):102. (T)**Distribution:** Borneo, China, Java, Sumatra.*Eusthenes variegatus* Yang, 19341934 *Eusthenes eurytus*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):59. (Dn; misdet. sec. Yang, 1935)1935 *Eusthenes variegatus* Yang, Bull. Fan Mem. Inst. Biol. 6(3):107, 111-112, pl. 3 fig. 45-47. (K)1935 *Eusthenes variegatus*: Tang, Cat. Ins. Sin. 2:366. (S, R)1945 *Eusthenes variegatus*: Blöte, Zool. Meded. 25:301-302.1948 *Eusthenes variegatus*: Hoffmann, Lingnan Sci. J. 22(1-4):35. (S, R)1957 *Eusthenes variegatus*: Zia, Acta Ent. Sin. 7:431, 435-436, fig. 25. (K, S, D, R)1962 *Eusthenes variegatus*: Stichel, Verz. Pal. Hem. Het. 4:204. (R)1980 *Eusthenes variegatus*: Chen, Ghizhou Agric. Sci. 1980(3):53, 57. (R, K)1989 *Eusthenes variegatus*: Hua, List Ins. Zhongshan Univ. 44. (L)**Distribution:** Burma, China (Fujian, Guangxi, Guizhou, Jiangxi, Sichuan, Yunnan), India (Assam), Indo-China, Laos, Vietnam.*Eusthenes viridis* Blöte, 19451945 *Eusthenes viridis* Blöte, Zool. Meded. 25:302, fig. 4a.1948 *Eusthenes viridis*: Hoffmann, Lingnan Sci. J. 22(1-4):35. (L)**Distribution:** China.*Eusthenimorpha* Yang, 1935Type species: *Eusthenimorpha jungi* Yang, 1835, by original designation.1935 *Eusthenimorpha* Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 118. (K)1935 *Eusthenimorpha*: Tang, Cat. Ins. Sin. 2:366. (L)1948 *Eusthenimorpha*: Hoffmann, Lingnan Sci. J. 22(1-4):35. (S)1957 *Eusthenimorpha*: Zia, Acta Ent. Sin. 7:425, 429. (K, R)1977 *Eusthenimorpha*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, figs. 301, 302. (K)*Eusthenimorpha jungi* Yang, 19351935 *Eusthenimorpha jungi* Yang, Bull. Fan Mem. Inst. Biol. 6(3):118-119, pl. 4 figs. 56-60.1935 *Eusthenimorpha jungi*: Tang, Cat. Ins. Sin. 2:366. (L)1948 *Eusthenimorpha jungi*: Hoffmann, Lingnan Sci. J. 22(1-4):36. (S)1957 *Eusthenimorpha jungi*: Zia, Acta Ent. Sin. 7:429-430, figs. 9-11. (D)1962 *Eusthenimorpha jungi*: Stichel, Verz. Pal. Hem. Het. 4:204. (L)1980 *Eusthenimorpha jungi*: Chen, Ghizhou Agric. Sci. 1980(3):53. (L)1989 *Eusthenimorpha jungi*: Hua, List Ins. Zhongshan Univ. 44. (L)**Distribution:** China (Zhejiang).*Mattiphus* Amyot & Serville, 1843Type species: *Mattiphus carrenoi* Amyot & Serville [= *Eusthenes laticollis* Westwood, 1837], by monotypy.1843 *Mattiphus* Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 168. (K)1846 *Mattiphus*: Agassiz, Nomen. Zool. Add. 8. (Ety)1850 *Mattiphus*: Spinola, Gen. Ins. Artr. 32. (K)1851 *Mattiphus*: Dallas, List. Hem. 1:317, 344. (K)1851 *Mattiphus*: Herrich-Schäffer, Wanz. Ins. 9:284. (K)1852 *Mattiphus*: Spinola, Mem. Soc. Ital. Modena 25(1):75. (reprint of 1850 paper)1865 *Mattiphus*: Stål, Hem. Afr. 1:225. (K)1868 *Mattiphus*: Walker, Cat. Het. 3:468.1870 *Mattiphus*: Stål, Sv. Vet. Akad. Handl. 9(1):70, 72. (K, S)1889 *Mattiphus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):70. (S, D)1893 *Mattiphus*: Distant, Ann. Mag. Nat. Hist. (6)11:433. (cf. *Origanus*)1893 *Mattiphus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)1894 *Mattiphus*: Montandon, Ann. Soc. Ent. Belg. 38:639. (cf. *Anacanthopus*)1902 *Mattiphus*: Distant, Fauna Brit. India, Rh. 1:263, 269. (K, D)1903 *Mattiphus*: Kirkaldy, Entomol. 36(484):231. (Tsp)1909 *Mattiphus*: Kirkaldy, Cat. Hem. 1:355. (L)1935 *Mattiphus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 124. (K, D, Ksp)1935 *Mattiphus*: Tang, Cat. Ins. Sin. 2:367. (S)1956 *Mattiphus*: Miller, Biol. Het. ed. 1:45. (Dn)1957 *Mattiphus*: Zia, Acta Ent. Sin. 7:425, 436. (K, D, Ks)1970 *Mattiphus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 20-21, 30. (K, D)1971 *Mattiphus*: Miller, Biol. Het. 54. (Dn)1977 *Mattiphus*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 65. (K)*Mattiphus aeruginosus* Stål, 18631863 *Mattiphus aeruginosus* Stål, Trans. Ent. Soc. Lond. (3)1:6001868 *Mattiphus aeruginosus*: Walker, Cat. Het. 3:469. (R)1870 *Mattiphus aeruginosus*: Stål, Sv. Vet. Akad. Handl. 9(1):73. (L)1889 *Mattiphus aeruginosus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):71-72. (S, D)1892 *Mattiphus aeruginosus*: Kirby, Linn. J. Zool. 24:87. (S, R)1893 *Mattiphus aeruginosus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)1902 *Mattiphus aeruginosus*: Distant, Fauna Brit. India, Rh. 1:270. (D)1909 *Mattiphus aeruginosus*: Kirkaldy, Cat. Hem. 1:355. (S)**Distribution:** Sri Lanka.*Mattiphus aurifer* Stål, 18701870 *Mattiphus aurifer* Stål, Sv. Vet. Akad. Handl. 9(1):72-73.1871 *Mattiphus aurifer*: Stål, Öfv. Vet. Akad. Förh. 27(7):644. (Dn)1873 *Mattiphus aurifer*: Walker, Cat. Het. Suppl. 26. (L)1893 *Mattiphus aurifer*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (L)1909 *Mattiphus aurifer*: Kirkaldy, Cat. Hem. 1:355. (L)

1923 *Mattiphus aurifer*: Lehmann, Zool. Anz. 57(7/8):181. (R)

1945 *Mattiphus aurifer*: Blöte, Zool. Meded. 25:303. (R)

Distribution: Philippines.

Mattiphus carrenoi Amyot & Serville, 1843 — see *Mattiphus laticollis*

Mattiphus celebensis Blöte, 1945

1945 *Mattiphus celebensis* Blöte, Zool. Meded. 25:303, fig. 5.

Distribution: Sulawesi (Celebes).

Mattiphus hians Stål, 1871

1871 *Mattiphus hians* Stål, Öfv. Vet. Akad. Förh. 27(7):644.

1873 *Mattiphus hians* Walker, Cat. Het. Suppl. 26. (L)

1893 *Mattiphus hians*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (L)

1909 *Mattiphus hians*: Kirkaldy, Cat. Hem. 1:355. (L)

1945 *Mattiphus hians*: Blöte, Zool. Meded. 25:303. (R)

1969 *Mattiphus hians*: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(37):12. (T)

Distribution: Philippines.

Mattiphus jaspideus (Herrich-Schäffer, 1851)

1851 *Pycnum jaspideum* Herrich-Schäffer, Wanz. Ins. 9:308, fig. 1009.

1859 *Pycnum jaspideum*: Dohrn, Cat. Hem. :21. (S)

1868 *Pycnum jaspideum*: Walker, Cat. Het. 3:470. (L)

1870 *Pycnum jaspideum*: Stål, Sv. Vet. Akad. Handl. 9(1):75. (Ts)

1889 *Mattiphus jaspideum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):78. (S, D)

1893 *Mattiphus jaspideus*: Distant, Ann. Mag. Nat. Hist. (6)11:432. (S)

1893 *Mattiphus jaspideus*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)

1902 *Mattiphus jaspideus*: Distant, Fauna Brit. India, Rh. 1:270. (S, D)

1909 *Mattiphus jaspideus*: Kirkaldy, Cat. Hem. 1:355. (S)

1921 *Mattiphus jaspideus*: Distant, Entomol. 54:(698)164. (R)

1935 *Mattiphus jaspideus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:136. (S)

1935 *Mattiphus jaspideus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):124, 125-126. (K, S, D, R)

1935 *Mattiphus jaspideus*: Tang, Cat. Ins. Sin. 2:367. (S, R)

1948 *Mattiphus jaspideus*: Hoffmann, Lingnan Sci. J. 22(1-4):37. (S, R)

1957 *Mattiphus jaspideus*: Zia, Acta Ent. Sin. 7:436, 437-438, fig. 29. (K, S, D, R)

1980 *Mattiphus jaspideus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)

Distribution: China (Guangxi, Guizhou), N.W. Himalayas, India (Assam), Indo-China, Malay Peninsula, Vietnam.

Mattiphus laticollis (Westwood, 1837)

1837 *Eusthenes laticollis* Westwood, Cat. Hope 1:27.

1843 *Mattiphus carrenoi* Amyot & Serville, Hist. Nat. Ins. Hem.:168. (syn. by Dallas, 1851)

1851 *Mattiphus carrenoi*: Herrich-Schäffer, Wanz. Ins. 9:309. (L)

1851 *Mattiphus laticollis*: Dallas, List. Hem. 1:344.

1859 *Mattiphus laticollis*: Dohrn, Cat. Hem. :21. (S)

1868 *Mattiphus laticollis*: Walker, Cat. Het. 3:468. (R)

1870 *Mattiphus laticollis*: Stål, Sv. Vet. Akad. Handl. 9(1):72. (S, R)

1889 *Mattiphus laticollis*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):71. (S, D)

1893 *Mattiphus laticollis*: Lethierry & Severin, Cat. Gen. Hem. 1:230. (S)

1901c *Mattiphus laticollis*: Distant, Proc. Zool. Soc. Lond. 1900(4):820. (S)

1902 *Mattiphus laticollis*: Distant, Fauna Brit. India, Rh. 1:269, fig. 170. (S, D)

1903 *Mattiphus laticollis*: Kirkaldy, Entomol. 36(484):231. (Tsp, S)

1909 *Mattiphus laticollis*: Kirkaldy, Cat. Hem. 1:355. (S)

1934 *Mattiphus laticollis*: Miller, J. F. M. S. Mus. 17(3):515-516, fig. 12. (I)

1945 *Mattiphus laticollis*: Blöte, Zool. Meded. 25:303. (R)

1970 *Mattiphus laticollis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):20-21, 27, 29, 30, figs. 71-73, 109. (Ge)

Distribution: India (Bengal), Java, Malay peninsula (Malaya), Sumatra.

Mattiphus minutus Blöte, 1945

1945 *Mattiphus minutus* Blöte, Zool. Meded. 25:303-304, fig. 4b.

1948 *Mattiphus minutus*: Hoffmann, Lingnan Sci. J. 22(1-4):37. (L)

1957 *Mattiphus minutus*: Zia, Acta Ent. Sin. 7:436-437, fig. 28. (K, D, R)

1977 *Mattiphus minutus*: Hsiao et al., Handb. Chinese Hem. - Het. 1:65, fig. 310, pl. 7 fig. 107. (K, R)

1980 *Mattiphus minutus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)

Distribution: China (Yunnan, Zhejiang).

Mattiphus nigricornis **NOMEN DUBIUM**

1970 *Mattiphus nigricornis*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):26, fig. 110. (Ge)

Mattiphus nigridorsis Stål, 1863 — see *Asiarcha nigridorsis*

Mattiphus oblongus Dallas, 1851 — see *Asiarcha oblonga*

Mattiphus reflexus (Dallas, 1851)

1851 *Eusthenes reflexus* Dallas, List. Hem. 1:344-345.

1859 *Mattiphus reflexus*: Dohrn, Cat. Hem. :21. (L)

1868 *Mattiphus reflexus*: Walker, Cat. Het. 3:468. (R)

1870 *Mattiphus reflexus*: Stål, Sv. Vet. Akad. Handl. 9(1):73. (L)

1893 *Mattiphus reflexus*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)

1909 *Mattiphus reflexus*: Kirkaldy, Cat. Hem. 1:355.

1923 *Mattiphus reflexus*: Lehmann, Zool. Anz. 57(7/8):181. (R)

1945 *Mattiphus reflexus*: Blöte, Zool. Meded. 25:304.

Distribution: Philippines.

Mattiphus splendidus Distant, 1921

1921 *Mattiphus splendidus* Distant, Entomol. 54:(698)166

1932a *Mattiphus splendidus*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)

1935 *Mattiphus splendidus*: Hoffmann, Lingnan Univ. Sci. Bull. 7:136. (L)

1935 *Mattiphus splendidus*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):124, 126, pl. 5 figs. 72-75. (K, D, R)

1935 *Mattiphus splendidus*: Tang, Cat. Ins. Sin. 2:368. (S, R)

1945 *Mattiphus splendidus*: Blöte, Zool. Meded. 25:304. (R)

1948 *Mattiphus splendidus*: Hoffmann, Lingnan Sci. J. 22(1-4):38. (S, R)

1957 *Mattiphus splendidus*: Zia, Acta Ent. Sin. 7:436, 438-439, fig. 26, 30, 31. (K, S, D, R)

- 1962 *Mattiphus splendidus*: Yang, Econ. Ins. Fauna China 2:40, 44, pl. 3 fig. 22.
 1977 *Mattiphus splendidus*: Hsiao et al, Handb. Chinese Hem. Het. 1:65, fig. 311, pl. 7 fig. 106.
 1980 *Mattiphus splendidus*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)
 1989 *Mattiphus splendidus*: Hua, List Ins. Zhongshan Univ. :44.

Distribution: China (Fujian, Guangxi, Guizhou, Sichuan, Yunnan), Indo-China, Laos.

Mattiphus yunnanensis Zia, 1957

- 1957 *Mattiphus yunnanensis* Zia, Acta Ent. Sin. 7:436, 439, 447-448, figs. 27, 32. (K)
 1980 *Mattiphus yunnanensis*: Chen, Ghizhou Agric. Sci. 1980(3):54, 57. (R, K)

Distribution: China (Yunnan).

Megaedoeum Karsh, 1895

Type species: *Megaedoeum verruculatum* Karsch, 1895, by monotypy.

- 1895 *Megaedoeum* Karsch, Ent. Nachr. Berlin 21(17):267-268.
 1904 *Megaedoeum*: Bergroth, Wien. Ent. Ztg. 23(2):37, 38-39, 40, fig. (Ts, D)
 1905 *Megaedoeum* (sic) Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):230, 234. (K, S, D)
 1908 *Megaedoeum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Megaedoeum*: Kirkaldy, Cat. Hem. 1:357. (S)
 1970 *Megaedoeum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 17, 25, 29. (K, D)

Megaedoeum bomansi Schouteden, 1957

- 1957 *Megaedoeum* (sic) *bomansi* Schouteden, Rev. Zool. Bot. Afr. 55(3-4):417-418.

Distribution: Zaïre.

Megaedoeum karschi Schouteden, 1905

- 1905 *Megaedoeum* (sic) *karschi* Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):236, fig. 106.
 1908 *Megaedoeum karschi*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Megaedoeum karschi*: Kirkaldy, Cat. Hem. 1:357. (S)
 1949 *Megaedoeum* (sic) *karschi*: Villiers, I.F.A.N. Catalogues 5:89.
 1952b *Megaedoeum* (sic) *karschi*: Villiers, Mem. I.F.A.N. 19:307. (R)
 1957 *Megaedoeum* (sic) *karschi*: Schouteden, Rev. Zool. Bot. Afr. 55(3-4):418. (R)
 1964 *Megaedoeum* (sic) *karschi*: Schouteden, Rev. Zool. Bot. Afr. 70(1-2):95. (R)
 1970 *Megaedoeum karschi*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):25, figs. 91-92. (Ge)
 1980 *Megaedoeum karschi*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982a *Megaedoeum* (sic) *karschi*: Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Cameroon, Ivory Coast, Guinea, Nigeria.

Megaedoeum obliquum Bergroth, 1904

- 1904 *Megaedoeum obliquum* Bergroth, Wien. Ent. Ztg. 23(2):39, 40. (K)
 1904a *Megaedoeum* (sic) *obliquum*: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:160. (R)
 1905 *Megaedoeum* (sic) *obliquum*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):236-238, figs. 107, 108,

pl. 5 fig. 11.

- 1908 *Megaedoeum obliquum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)

- 1909 *Megaedoeum obliquum*: Kirkaldy, Cat. Hem. 1:358. (S)

Distribution: Cameroon.

Megaedoeum verruculatum Karsch, 1895

- 1895 *Megaedoeum verruculatum* Karsch, Ent. Nachr. Berlin 21(17):268-269.
 1904 *Megaedoeum verruculatum*: Bergroth, Wien. Ent. Ztg. 23(2):39-40, fig. (D)
 1905 *Megaedoeum* (sic) *verruculatum*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):234-236, figs. 101-105. (S, D)
 1908 *Megaedoeum verruculatum*: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)
 1909 *Megaedoeum verruculatum*: Kirkaldy, Cat. Hem. 1:358. (S)
 1970 *Megaedoeum verruculatum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):28, figs. 101, 102, 117. (E, Ge)

Distribution: Cameroon, Togo.

Origanus Distant, 1893

Type species: *Origanus humerosus* Distant, 1893, by monotypy.

- 1893 *Origanus* Distant, Ann. Mag. Nat. Hist. (6)11:432-433.
 1893 *Origanus*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)
 1894 *Origanus*: Montandon, Ann. Soc. Ent. Belg. 38:639. (cf. *Anacanthopus*)
 1902 *Origanus*: Distant, Fauna Brit. India, Rh. 1:263, 271. (K, D)
 1909 *Origanus*: Kirkaldy, Cat. Hem. 1:355. (S)
 1970 *Origanus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 22, 30. (K, D)

Origanus humerosus Distant, 1893

- 1893 *Origanus humerosus* Distant, Ann. Mag. Nat. Hist. (6)11:433.
 1893 *Origanus humerosus*: Lethierry & Severin, Cat. Gen. Hem. 1:231. (L)
 1902 *Origanus humerosus*: Distant, Fauna Brit. India, Rh. 1:271-272, fig. 171. (D)
 1909 *Origanus humerosus*: Kirkaldy, Cat. Hem. 1:355. (S)
 1970 *Origanus humerosus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 26-27, figs. 79-81, 111. (E & Ge)
 1990 *Origanus humerosus*: Zheng & Jir Contr. Shanghai Inst. Ent. 9:145. (R)

Distribution: China (Xizang = Tibet), India (Assam).

Origanus tibetanus Zheng & Jin, 1990

- 1990 *Origanus tibetanus* Zheng & Jin, Contr. Shanghai Inst. Ent. 9: 142, 143, figs. 2, 4.

Distribution: China (Xizang).

Oxylobus Stål, 1870 — see *Pseudopycnanus*

Oxylobus nigromarginatum Stål, 1863 — see *Pseudopycnanus nigromarginatum*

Oxylobus westwoodii (Vollenhoven, 1866) — see *Sanganus westwoodii*

Pseudopycnanus Bergroth, 1891

Type species: *Pycnanus nigromarginatum* Stål 1863, designated by Kirkaldy, 1909

- 1870 Oxylobus Stål, Sv. Vet. Akad. Handl. 9(1):70, 75-76. (K) (preoccup. Chaudoir, 1855)
- 1889 Oxylobus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):79. (D)
- 1891 Pseudopycanum Bergroth, Rev. Ent. 10:214. (Nn for Oxylobus Stål, 1870)
- 1893 Oxylobus: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
- 1909 Oxylobus: Kirkaldy, Cat. Hem. 1:XXXVI. (Tsp)
- 1909 Pseudopycanum: Kirkaldy, Cat. Hem. 1:356. (S)
- 1970 Pseudopycanum: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 19, 30. (K, D)
- Pseudopycanum nigromarginatum (Stål, 1863)
- 1863 Pycanum nigromarginatum Stål, Trans. Ent. Soc. Lond. (3)1:601.
- 1866 Dalcantha servillei Vollenhoven, Tijdschr. Ent. (2)1:220, pl. 11, fig. 9. (syn. by Stål, 1870)
- 1868 Pycanum nigromarginatum: Walker, Cat. Het. 3:470. (R)
- 1870 Oxylobus nigromarginatum: Stål, Sv. Vet. Akad. Handl. 9(1):76. (S, R)
- 1873 Oxylobus nigromarginatum: Walker, Cat. Het. Suppl. 27. (L)
- 1889 Oxylobus nigromarginatum: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):80. (S, D)
- 1893 Oxylobus nigromarginatum: Lethierry & Severin, Cat. Gen. Hem. 1:232. (L)
- 1909 Pseudopycanum nigromarginatum: Kirkaldy, Cat. Hem. 1:356-357. (S)
- 1945 Pseudopycanum nigromarginatum: Blöte, Zool. Meded. 25:307. (R, T)
- 1970 Pseudopycanum nigromarginatum: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19, 26, figs. 65-68. (Ge)
- Distribution:** Moluccas.
- Pseudopycanum westwoodii (Vollenhoven, 1866) — Sanganus westwoodii
- Pycanum Amyot & Serville, 1843
- Type species: Edessa amethystina Fabricius, 1803 [= Cimex rubens Fabricius, 1794] by monotypy.
- 1843 Pycanum Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 171-172. (K)
- 1846 Pycanum: Agassiz, Normen. Zool. Hem. Add.:11. (Ety)
- 1850 Pycanum: Spinola, Gen. Ins. Artr.:32. (K) (misdet. of Cyclopelta Amyot & Serville, 1834, family Dinidoridae, sec Kirkaldy, 1909)
- 1850 Cyclopelta: Spinola, Gen. Ins. Artr.:33. (K) (misdet. sec Kirkaldy, 1909)
- 1851 Pycanum: Dallas, List. Hem. 1:318, 345. (K, S)
- 1851 Pycanum: Herrich-Schäffer, Wanz. Ins. 9:283. (K)
- 1852 Pycanum: Spinola, Mem. Soc. Ital. Modena 25(1):72. (reprint of 1850 paper)
- 1852 Cyclopelta: Spinola, Mem. Soc. Ital. Modena 25(1):73. (reprint of 1850 paper)
- 1865 Pycanum: Stål, Hem. Afr. 1:225. (K)
- 1868 Pycanum: Vollenhoven, Faune Ent. Indo-Neerl. 3:32. (D)
- 1870 Pycanum: Stål, Sv. Vet. Akad. Handl. 9(1):71, 75. (K, S)
- 1889 Pycanum: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):75. (S, D)
- 1893 Pycanum: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
- 1902 Pycanum: Distant, Fauna Brit. India, Rh. 1:263, 274. (K, S, D)
- 1903 Pycanum: Kirkaldy, Entomol. 36(484):231. (Tsp)
- 1909 Pycanum: Kirkaldy, Cat. Hem. 1:356. (S)
- 1935 Pycanum: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 122-123. (K, S, D)
- 1935 Pycanum: Tang, Cat. Ins. Sin. 2:368. (S)
- 1957 Pycanum: Zia, Acta Ent. Sin. 7:425, 445. (K, S, D, Ks)
- 1970 Pycanum: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):17, 22, 30. (K, D)
- 1972 Pycanum (sic): Jordan, Handb. Zool. 4(2)/20:39. (L)
- 1977 Pycanum: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 67. (K)
- Pycanum alternatum Lepeletier & Serville, 1825 — see Pycanum rubens
- Pycanum alternatum amethysta Kirkaldy, 1909 — see Pycanum rubens
- Pycanum amethystinum (Weber, 1801) — see Pycanum rubens
- Pycanum amplicolle Stål, 1863 — see Carpona amplicolle
- Pycanum amyoti (Vollenhoven, 1866) — see Carpona vollenhoveni
- Pycanum angulatum Stål, 1863 — see Carpona angulata
- Pycanum imperiale Dohrn, 1863 — see Carpona imperialis
- Pycanum jaspideum Herrich-Schäffer, 1851 — see Mattiphus jaspideus
- Pycanum nigromarginatum Stål, 1863 — see Pseudopycanum nigromarginatum
- Pycanum ochraceum Distant, 1893
- 1879 Pycanum rubens: Distant, Ann. Mag. Nat. Hist. (5)3:52. (misdet. sec. Distant, 1893; Dn, R)
- 1893 Pycanum ochraceum: Distant, Ann. Mag. Nat. Hist. (6)11:433-434
- 1893 Pycanum ochraceum: Lethierry & Severin, Cat. Gen. Hem. 1:232. (L)
- 1901a Pycanum ochraceum: Distant, Trans. Ent. Soc. Lond. 1901(1):104. (R)
- 1902 Pycanum ochraceum: Distant, Fauna Brit. India, Rh. 1:275. (D, R)
- 1909 Pycanum ochraceum: Kirkaldy, Cat. Hem. 1:356. (S)
- 1919 Pycanum ochraceum: Paiva, Rec. Indian Mus. 16:354. (R)
- 1921 Pycanum ochraceum: Distant, Entomol. 54.(698)164. (R)
- 1935 Pycanum ochraceum: Hoffmann, Lingnan Univ. Sci. Bull. 7:137. (S, R)
- 1935 Pycanum ochraceum: Yang, Bull. Fan Mem. Inst. Biol. 6(3):123, pl. 4 fig. 67. (S, D, R)
- 1935 Pycanum ochraceum: Tang, Cat. Ins. Sin. 2:368. (S, D)
- 1945 Pycanum ochraceum: Blöte, Zool. Meded. 25:307. (R)
- 1948 Pycanum ochraceum: Hoffmann, Lingnan Sci. J. 22(1-4):38-39. (S, R)
- 1957 Pycanum ochraceum: Zia, Acta Ent. Sin. 7:445, 446. (K, S, D, R)
- 1962 Pycanum ochraceum: Yang, Econ. Ins. Fauna China 2:40, 42-43, pl. 4 fig. 30.
- 1977 Pycanum ochraceum: Hsiao et al., Handb. Chinese Hem.-Het. 1:67, fig. 309, pl. 7 fig. 114. (D)
- 1980 Pycanum ochraceum: Chen, Ghizhou Agric. Sci.

- 1980(3):54, 58. (R, K)
 1985 *Pycanum ochraceum*: Zhang, Econ. Ins. China 31:50, pl. 46 fig. 156. (D)
 1987 *Pycanum ochraceum*: Zhang & Lin, Agric. Ins. Xizang 1:76. (R)
 1988 *Pycanum ochraceum*: Zhang & Lin, Ins. Mt. Namjagbarwa :84. (R)
 1989 *Pycanum ochraceum*: Hua, List Ins. Zhongshan Univ. :45. (L)
 1990 *Pycanum ochraceum*: Zheng & Jin, Contr. Shanghai Inst. Ent. 9: 142. (R)
Distribution: Bhutan, Burma, China (Guangxi, Guizhou, Xizang, Yunnan), India (Assam, Bengal, West Bengal (Darjeeling), Sikkim), Indo-China, Vietnam.

Pycanum oculatum Jensen-Haarup, 1931

- 1931 *Pycanum oculatum* Jensen-Haarup, Ent. Medd. 17:328.
Distribution: Java.

Pycanum pallipes Walker, 1868 — see *Asiarcha oblonga*

Pycanum ponderosum Stål, 1854

- 1854 *Pycanum ponderosum* Stål, Öfv. Vet. Akad. Förh. 11(8):234.
 1856 *Pycanum ponderosum*: Stål, Öfv. Vet. Akad. Förh. 13:63-64, pl. 1 fig. 1. (D)
 1859 *Pycanum ponderosum*: Dohrn, Cat. Hem.: 21. (L)
 1866 *Dalcantha sanctifargavii* Vollenhoven, Tijdschr. Ent. (2)1:218, pl. 11 fig. 6. (syn. by Stål, 1870)
 1868 *Pycanum ponderosum*: Walker, Cat. Het. 3:471. (S, R)
 1870 *Pycanum ponderosum*: Stål, Sv. Vet. Akad. Handl. 9(1):75. (S)
 1889 *Pycanum ponderosum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):77. (S, D, R)
 1892 *Pycanum ponderosum*: Kirby, Linn. J. Zool. 24:87. (R)
 1893 *Pycanum ponderosum*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1901a *Pycanum ponderosum*: Distant, Trans. Ent. Soc. Lond. 1901(1):104. (R)
 1902 *Pycanum ponderosum*: Distant, Fauna Brit. India, Rh. 1:275. (S, D, R)
 1909 *Pycanum ponderosum*: Kirkaldy, Cat. Hem. 1:356. (S)
 1921 *Pycanum ponderosum*: Distant, Entomologist 54:(698)164. (R)
 1931 *Pycanum ponderosum*: Miller, Dept. Agric. S.S. & F.M.S. Sci. Ser. 5:68-72, figs. 59-62. (S, H, B, E, I, D)
 1934 *Pycanum ponderosum*: Miller, J. F. M. S. Mus. 17(3):517, fig. 32. (egg cluster)
 1935 *Pycanum ponderosum*: Hoffmann, Lingnan Univ. Sci. Bull. 7:137, 177. (S, R)
 1945 *Pycanum ponderosum*: Biôte, Zool. Meded. 25:307. (R)
 1948 *Pycanum ochraceum*: Hoffmann, Lingnan Sci. J. 22(1-4):39. (S, R)
 1956 *Pycanum ponderosum*: Miller, Biol. Het. ed. 1:48. (E)
 1970 *Pycanum ponderosum*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 26, 27, 30, fig. 112. (& Ge)
 1971 *Pycanum ponderosum*: Miller, Biol. Het. :57. (E)
 1985 *Pycanum ponderosum*: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:23-24, fig. 57. (Dn, R)
 1987 *Pycanum ponderosum*: Schaefer & Ahmad, Phytophaga 1:27. (H)

Distribution: Burma, India (Assam, Sikkim), Malay Peninsula, Sri Lanka, Vietnam.

Pycanum pretiosum Stål, 1854

- 1854 *Pycanum pretiosum* Stål, Öfv. Vet. Akad. Förh. 11(8):234.

- 1856 *Pycanum pretiosum*: Stål, Öfv. Vet. Akad. Förh. 13:64, pl. 1 fig. 2. (D)
 1859 *Pycanum pretiosum*: Dohrn, Cat. Hem.: 21. (L)
 1868 *Pycanum pretiosum*: Walker, Cat. Het. 3:471. (L)
 1868 *Pycanum rubidum* Walker, Cat. Het. 3:471-472. (syn. by Distant, 1893)
 1870 *Pycanum pretiosum*: Stål, Sv. Vet. Akad. Handl. 9(1):75. (S, R)
 1871 *Pycanum pretiosum*: Stål, Öfv. Vet. Akad. Förh. 27(7):608, 645. (Dn, R)
 1889 *Pycanum pretiosum*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):77. (S, D)
 1893 *Pycanum pretiosum*: Distant, Ann. Mag. Nat. Hist. (6)11:434. (S)
 1893 *Pycanum pretiosum*: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1900 *Pycanum pretiosum*: Distant, Ann. Mag. Nat. Hist. (7)6:64. (S)
 1903a *Pycanum pretiosum*: Distant, Fasc. Malay. Zool. 1(2):238. (S, R)
 1909 *Pycanum pretiosum*: Kirkaldy, Cat. Hem. 1:356. (S)
 1923 *Pycanum pretiosum*: Lehmann, Zool. Anz. 57(7/8):181. (R)
 1968 *Pycanum pretiosum*: Black, Ent. Medd. 36:562. (R)
Distribution: Malay Peninsula (Malaya), Moluccas, Philippines.

Pycanum rubens (Fabricius, 1794)

- 1794 *Cimex rubens* Fabricius, Ent. Syst. 4:107.
 1801 *Cimex amethystinus* Weber, Obs. Ent.:115. (syn. by Kirkaldy, 1909)
 1803 *Edessa amethystinus* Fabricius, Syst. Rh. :150. (as n. sp.; syn. by Vollenhoven, 1868)
 1803 *Edessa rubens*: Fabricius, Syst. Rh. :151.
 1825 *Tessaratomy alternata* Lepeletier & Serville, Enc. Meth. 10:591-592. (syn. with *Edessa amethystinus* by Burmeister, 1935)
 1834 *Aelia amethystina*: Burmeister, Silb. Rev. Ent. 2:22. (antennae)
 1835 *Aspongopus amethystinus*: Burmeister, Handb. Ent. 2:351-352. (S, Dn)
 1837 *Dinidor (Eusthes) amethystinus*: Spinola, Essai :303. (L)
 1837 *Dinidor alternatum*: Spinola, Essai :304. (Ts)
 1838 *Aspongopus amethystinus*: Herrich-Schäffer, Wanz. Ins. 4:85, fig. 417.
 1840 *Aspongopus amethystinus*: Blanchard, Hist. Nat. Ins. 3:143. (S, D)
 1843 *Pycanum amethystinum*: Amyot & Serville, Hist. Nat. Ins. Hem.:172. (S, D)
 1844 *Dinidor amethystinus*: Herrich-Schäffer, Wanz. Ins. 7:76. (K)
 1851 *Pycanum amethystinus*: Dallas, List. Hem. 1:345. (S, R)
 1859 *Pycanum amethystinus*: Dohrn, Cat. Hem. :21. (S)
 1862 *Pycanum amethystinus*: Ellenrieder, Nat. Tijd. Ned. Ind. 24:161-169, pl. 5 fig. 28, pl. 6 figs. 1, 4, 6-10. (D)
 1866 *Aspongopus amethystinus*: Dohrn, Stett. Ent. Ztg. 27:331, pl. 4 fig. 12.
 1866 *Pycanum amethystinus*: Mayr, Reise Novara Zool. 2(1):74. (S, R)
 1868 *Pycanum rubens*: Vollenhoven, Faune Ent. Indo-Neerl. 3:32-33. (S, T, D, varr.)
 1868 *Pycanum rubens*: Stål, Sv. Vet. Akad. Handl. 7(11):40. (S, T)
 1868 *Pycanum amethystinus*: Walker, Cat. Het. 3:471. (R)
 1870 *Pycanum rubens*: Stål, Sv. Vet. Akad. Handl. 9(1):75. (S, R)

- 1873 Pycanum rubens: Walker, Cat. Het. Suppl. 27. (S)
 1879 Pycanum rubens: Distant, Ann. Mag. Nat. Hist. (5)3:45, 52. (misdet. see Pycanum ochraceum)
 1888 Pycanum rubens: Lethierry, Ann. Mus. Civ. Storia Nat. Genova (2)6(26):461. (R)
 1889 Pycanum rubens: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):75-76. (S, D, R)
 1893 Pycanum rubens: Distant, Ann. Mag. Nat. Hist. (6)11:433, 434. (cf. Pycanum ochraceum)
 1893 Pycanum rubens: Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)
 1900a Pycanum rubens var. amethystinus: Breddin, Abh. Senckenb. Naturf. Ges. 25:148. (R)
 1900b Pycanum rubens: Breddin, Stett. Ent. Ztg. 61:331. (R)
 1900b Pycanum rubens var. amethystinus: Breddin, Stett. Ent. Ztg. 61:331. (R)
 1901a Pycanum rubens: Distant, Trans. Ent. Soc. Lond. 1901(1):104.
 1901 Pycanum rubens: Kirkaldy, Entomol. 34(453):52. (R)
 1902 Pycanum rubens: Distant, Fauna Brit. India, Rh. 1:274-275. (S, D, R)
 1903a Pycanum rubens: Distant, Fasc. Malay. Zool. 1(2):238. (S, R)
 1903 Pycanum rubens: Kirkaldy, Entomol. 34(484):231. (Tsp, S)
 1909 Pycanum rubens: Banks, Philipp. J. Sci. 4(6):564. (S, R)
 1909 Pycanum alternatum: Kirkaldy, Cat. Hem. 1:356. (S, H)
 1909 Pycanum alternatum var. amethysta (sic): Kirkaldy, Cat. Hem. 1:371. (Nn for Cimex amethystinus Weber, 1801)
 1923 Pycanum alternatum: Lehmann, Zool. Anz. 57(7/8):181. (R)
 1928 Pycanum rubens: China, J.F.M.S. Mus. 8:193. (R)
 1933 Pycanum alternatum: Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51. (R)
 1934 Pycanum alternatum: Miller, J. F. M. S. Mus. 17(3):503, 516, figs. 13, 31. (E, I)
 1945 Pycanum alternatum: Blöte, Zool. Meded. 25:306-307. (R)
 1948 Pycanum rubens: Hoffmann, Lingnan Sci. J. 22(1-4):39-40. (S, R)
 1950 Pycanum alternatum: Kalshoven, Plagen Cultuurgewassen Indonesie 1:203-204, fig. 88 (H, R)
 1957 Pycanum rubens: Zia, Acta Ent. Sin. 7:445-446. (K, S, D, R)
 1968 Pycanum ruber (sic): Cobben, Evol. Trends Het. Eggs 1:114-115. (E)
 1970 Pycanum rubens: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):22, 26, 27, figs. 82-83. (Ge)
 1980 Pycanum rubens: Chen, Ghizhou Agric. Sci. 1980(3):54, 58. (R, K)
 1981 Pycanum ruber (sic): Hinton, Biol. Ins. Eggs. 1:594. (E)
 1981 Pycanum alternatum: Kalshoven, Pests Crops Indonesia :94, fig. 65. (H, R)
 1987 Pycanum alternatum: Schaefer & Ahmad, Phytophaga 1:27. (H)
Distribution: Borneo, Burma, China (Yunnan), E. Indies, India, Indo-China; Indonesia (Bangka I., Belitung I., Nias I.), Java, Malay Peninsula, Moluccas, Philippines, Sumatra, Vietnam.

Pycanum rubidum Walker, 1868 — see Pycanum pretiosum

Pycanum smaragdiferum Walker, 1868 — see Carpona angulata

Pycanum stabile Walker, 1868 — see Carpona stabile

Pycanum westwoodii (Vollenhoven, 1866) — see Sanganus westwoodii

Pyganum Amyot & Serville, 1843 — see Pycanum

Sanganus Distant, 1909

Type species: Sanganus jenseni Distant, 1909, by original designation.

1909a Sanganus: Distant, Trans. Ent. Soc. Lond. 1909(3):389.

1909 Sanganus: Kirkaldy, Cat. Hem. 1:366. (L)

1970 Sanganus: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):16, 19-20, 30. (K, D)

Sanganus jenseni Distant, 1909

1909a Sanganus jenseni Distant, Trans. Ent. Soc. Lond. 1909(3):389-390, pl. 10 fig. 6.

1909 Sanganus jenseni: Kirkaldy, Cat. Hem. 1:366. (L)

1945 Sanganus jenseni: Blöte, Zool. Meded. 25:307. (R)

1970 Sanganus jenseni: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):19-20, 26, 27, figs. 69-70, 108. (& Ge)

Distribution: Borneo, New Guinea, Sumatra.

Sanganus westwoodii (Vollenhoven, 1866)

1866 Dalcantha westwoodii Vollenhoven, Tijdschr. Ent. (2)1:217-218, pl. 11, fig. 5.

1868 Pycanum westwoodii: Vollenhoven, Faune Ent. Indo-Neerl. 3:33-34, pl. 3 fig. 7. (D)

1868 Pycanum westwoodii: Walker, Cat. Het. 3:471. (L)

1870 Oxylobus westwoodii: Stål, Sv. Vet. Akad. Handl. 9(1):76. (S)

1873 Oxylobus westwoodii: Walker, Cat. Het. Suppl. 27. (L)

1893 Oxylobus westwoodii (sic): Lethierry & Severin, Cat. Gen. Hem. 1:232. (S)

1907a Oxylobus westwoodii (sic): Schouteden, Notes Leyden Mus. 30:44. (Ts)

1909 Pseudopycanum westwoodii (sic): Kirkaldy, Cat. Hem. 1:357. (S)

1945 Sanganus westwoodii: Blöte, Zool. Meded. 25:307. (R)

Distribution: Sumatra.

Serrocarpone Blöte, 1945

Type species: Serrocarpone celebensis Blöte, 1945, by original designation.

1945 Serrocarpone Blöte, Zool. Meded. 25:305-306

Serrocarpone celebensis Blöte, 1945

1945 Serrocarpone celebensis Blöte, Zool. Meded. 25:306, fig. 5.

Distribution: Sulawesi (Celebes).

Viribius Stål, 1865 — see Carpona

Viribius angulatus (Stål, 1863) — Carpona angulata

Viribius imperialis (Dohrn, 1863) — Carpona imperialis

TESSARATOMARIA

Stål, 1865: 33.

Type genus: Tessaratomia Lepeletier & Serville, 1825

1865 Tessaratomida Stål, Hem. Afr. 1:33.

1902 Tessaratomaria: Distant, Fauna Brit. India, Rh. 1:257. (S, D, Kg)

1937 Tessaratomini: Beier, Handb. Zool. 4(2) Ins. 2:2186. (D)

1970 Tessaratoma: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):4-5. (K, Kg)

Acidosterna Stal, 1872

Type species: Acidosterna nitida Stal, 1872, by monotypy.

1872 Acidosterna Stal, Sv. Vet. Akad. Handl. 10(4):129-130.

1893 Acidosterna: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)

1909 Acidosterna: Kirkaldy, Cat. Hem. 1:351. (L)

1970 Acidosterna: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 8, 15.

Acidosterna nitida Stal, 1872

1872 Acidosterna nitida Stal, Sv. Vet. Akad. Handl. 10(4):130.

1893 Acidosterna nitida: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)

1909 Acidosterna nitida: Kirkaldy, Cat. Hem. 1:351. (L)

Distribution: Moluccas.

Acidosterna notata Blöte, 1945

1945 Acidosterna notata Blöte, Zool. Meded. 25:296.

Distribution: Sumatra.

Amissus Stål, 1863

Type species: Amissus atlas Stal, 1863a, by monotypy.

1863 Amissus Stål, Trans. Ent. Soc. Lond. (3)1:595.

1870 Amissus: Stal, Sv. Vet. Akad. Handl. 9(1):70. (L)

1889 Amissus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):62-63. (D)

1893 Amissus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)

1902 Amissus: Distant, Fauna Brit. India, Rh. 1:257, 262. (K, D)

1909 Amissus: Kirkaldy, Cat. Hem. 1:353. (L)

1956 Amissus: Miller, Biol. Het. ed. 1:45. (Dn)

1970 Amissus: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):4, 5, 15. (K, D)

1971 Amissus: Miller, Biol. Het. 54 (Dn)

Amissus atlas Stal, 1863

1863 Amissus atlas Stal, Trans. Ent. Soc. Lond. (3)1:596.

1868 Amissus atlas: Walker, Cat. Het. 3:466. (R)

1870 Amissus atlas: Stal, Sv. Vet. Akad. Handl. 9(1):70. (L)

1889 Amissus atlas: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):63. (S, D)

1893 Amissus atlas: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)

1902 Amissus atlas: Distant, Fauna Brit. India, Rh. 1:262, fig. 167. (S, D, R, T)

1909 Amissus atlas: Kirkaldy, Cat. Hem. 1:353. (S)

1945 Amissus atlas: Blöte, Zool. Meded. 25:299. (R)

1970 Amissus atlas: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):fig. 39. (spermatheca)

Distribution: Burma, Malay peninsula (Singapore), Sumatra.

Amissus nitidus Walker, 1868

1868 Amissus nitidus Walker, Cat. Het. 3:466.

1893 Amissus nitidus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)

1900 Amissus nitidus: Distant, Ann. Mag. Nat. Hist. (7)6:62. (Ts)

1900a Amissus nitidus: Breddin, Abh. Senckenb. Naturf.

Ges. 25:147. (R)

1909 Amissus nitidus: Kirkaldy, Cat. Hem. 1:353. (L)

1945 Amissus nitidus: Blöte, Zool. Meded. 25:299. (R)

1970 Amissus nitidus: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 12, 13, figs. 6-8, 40. (& Ge)

Distribution: Borneo, Sarawak.

Amissus testaceus Distant, 1909

1909a Amissus testaceus Distant, Trans. Ent. Soc. Lond.

1909(3):388-389, pl. 10 fig. 5.

1909 Amissus testaceus: Kirkaldy, Cat. Hem. 1:370. (L)

1970 Amissus testaceus: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):12. (Ge)

Distribution: Moluccas.

Embolosterna Stal, 1870

Type species: Tessaratom taurus Westwood, 1837, by monotypy.

1870 Embolosterna Stal, Sv. Vet. Akad. Handl. 9(1):66.

1889 Embolosterna: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):52-53. (D)

1893 Embolosterna: Lethierry & Severin, Cat. Gen. Hem. 1:226. (L)

1909 Embolosterna: Kirkaldy, Cat. Hem. 1:349. (L)

1921 Embolosterna: Lehmann, Arch. Naturges. Berlin. 87A(6):36-37. (Ks)

1922a Embolosterna: Bergroth, Ann. Soc. Ent. Belg. 61:376. (humeri)

1935 Embolosterna: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 126-127. (K, D)

1935 Embolosterna: Tang, Cat. Ins. Sin. 2:362. (S)

1956 Embolosterna: Miller, Biol. Het. ed. 1:45. (Dn)

1957 Embolosterna: Zia, Acta Ent. Sin. 7:425. (K, D)

1970 Embolosterna: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 10, 14, 15. (K, D)

1971 Embolosterna: Miller, Biol. Het. 54. (Dn)

1977 Embolosterna: Hsiao et al., Handb. Chinese Hem.-Het. 1:63. (K)

Embolosterna olivacea Horváth, 1900

1900a Embolosterna olivacea Horváth, Term. Füzet. 23:366.

1908 Embolosterna olivacea: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)

1909 Embolosterna olivacea: Kirkaldy, Cat. Hem. 1:349. (L)

1921 Embolosterna olivacea: Lehmann, Arch. Naturges. Berlin. 87A(6):37, fig. 1c. (K)

1945 Embolosterna olivacea: Blöte, Zool. Meded. 25:292. (R)

Distribution: Borneo.

Embolosterna rubromaculata Lehmann, 1921

1921 Embolosterna rubromaculata Lehmann, Arch. Naturges. Berlin. 87A(6):36, 37-38, fig. 1b. (K)

1923 Embolosterna rubromaculata: Lehmann, Zool. Anz. 57(7/8):180. (R)

Distribution: Borneo

Embolosterna taurus (Westwood, 1837)

1837a Tessaratomia (sic) taurus Westwood, Cat. Hope 1:27.

1851 Tessaratomia? cornuta Dallas, List. Hem. 1:342. (syn by Stal, 1862)

1859 Tessaratomia? cornuta: Dohrn, Cat. Hem. 21.

1859 Tessaratomia? taurus: Dohrn, Cat. Hem. 21.

1862 Tessaratomia (sic) taurus: Stal, Öfv. Vet. Akad. Förh. 19(9):501. (S)

1868 Tessaratomia (sic) cornuta: Walker, Cat. Het. 3:462. (R)

- 1870 Embolosterna taurus: Stal, Sv. Vet. Akad. Handl. 9(1):66. (S, R)
- 1873 Tessaratomya (sic) cornuta: Walker, Cat. Het. Suppl. 26. (S)
- 1889 Embolosterna taurus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):53. (S, D)
- 1893 Embolosterna taurus: Distant, Anni. Mag. Nat. Hist. (6)11:430-431. (Dn, R)
- 1893 Embolosterna taurus: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
- 1901c Embolosterna taurus: Distant, Proc. Zool. Soc. Lond. 1900(4):820. (S)
- 1909 Embolosterna taurus: Kirkaldy, Cat. Hem. 1:349 (S)
- 1921 Embolosterna taurus: Lehmann, Arch. Naturges. Berlin. 87A(6):37, fig. 1a. (K)
- 1932b Embolosterna taurus: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10.
- 1935 Embolosterna taurus: Hoffmann, Lingnan Univ. Sci. Bull. 7:130. (S, R)
- 1935 Embolosterna taurus: Yang, Bull. Fan Mem. Inst. Biol. 6(3):127, pl. 5 figs. 76, 77. (D, R)
- 1935 Embolosterna taurus: Tang, Cat. Ins. Sin. 2:362. (S, R)
- 1945 Embolosterna taurus: Blöte, Zool. Meded. 25:292. (R)
- 1948 Embolosterna taurus: Hoffmann, Lingnan Sci. J. 22(1-4):28-29. (S, D)
- 1956 Embolosterna taurus: Miller, Biol. Het. ed. 1:28-29. (stridulation)
- 1957 Embolosterna taurus: Zia, Acta Ent. Sin. 7:425-426, fig. 2. (S, D)
- 1970 Embolosterna taurus: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):10, 12, 13, figs. 30-32, 38. (K. & Ge)
- 1980 Embolosterna taurus: Chen, Ghizhou Agric. Sci. 1980(3):53, 56. (R, K)
- Distribution:** Borneo, China, India, Malay Peninsula, Sumatra.

Embolosterna unicolorus Distant, 1909

- 1909a Embolosterna unicolorus Distant, Trans. Ent. Soc. Lond. 1909(3):388, pl. 10 fig. 4.
- 1909 Embolosterna unicolorus: Kirkaldy, Cat. Hem. 1:370.
- 1921 Embolosterna unicolorus: Lehmann, Arch. Naturges. Berlin. 87A(6):36. (K)

Distribution: Borneo

Embolosterna vacca Martin, 1902

- 1902 Embolosterna vacca Martin, Bull. Mus. Paris 8:335.
- 1908 Embolosterna vacca: Bergroth, Mem. Soc. Ent. Belg. 15:185. (L)
- 1909 Embolosterna vacca: Kirkaldy, Cat. Hem. 1:349
- 1921 Embolosterna vacca: Lehmann, Arch. Naturges. Berlin. 87A(6):36. (K)
- 1922 Embolosterna vacca: Bergroth, Ann. Soc. Ent. Belg. 61:376. (humeral)
- 1923 Embolosterna vacca: Lehmann, Zool. Anz. 57(7/8):180. (R)
- 1945 Embolosterna vacca: Blöte, Zool. Meded. 25:292. (R)
- Distribution:** Borneo.

Enada Walker, 1863

Type species: Enada rosea Walker, 1866, by monotypy.

- 1868 Enada Walker, Cat. Het. 3:485
- 1893 Enada: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)
- 1909 Enada: Kirkaldy, Cat. Hem. 1:360. (L)
- 1945 Enada: Blöte, Zool. Meded. 25:298 (Dn, moved from Aplosternini to Tessaratomini)
- 1974 Enada: Kumar, J. Nat. Hist. 8(6):676. (Dn, R)

Enada dollingi Kumar, 1974

- 1974 Enada dollingi Kumar, J. Nat. Hist. 8(6):677-678, figs. 6-13.

Distribution: Borneo.

Enada marginepunctata Blöte, 1945

- 1945 Enada marginepunctata Blöte, Zool. Meded. 25:298-299.

Distribution: Borneo.

Enada rosea Walker, 1868

- 1868 Enada rosea Walker, Cat. Het. 3:485.
- 1893 Enada rosea: Lethierry & Severin, Cat. Gen. Hem. 1:234. (L)
- 1900a Enada rosea: Distant, Ann. Mag. Nat. Hist. (7)6:233. (Ts)
- 1909 Enada rosea: Kirkaldy, Cat. Hem. 1:360. (L)
- 1974 Enada rosea: Kumar, J. Nat. Hist. 8(6):677, fig. 14. (Dn)

Distribution: unknown.

Hypencha Amyot & Serville, 1843

Type species: Tessaratomya apicalis Lepeletier & Serville, 1825, by monotypy.

- 1843 Hypencha Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 166. (K)
- 1846 Hypencha: Agassiz, Nomen. Zool. Hem. Add.:7. (Ety)
- 1851 Hypencha: Herrich-Schäffer, Wanz. Ins. 9:284. (K)
- 1865 Hypencha: Stal, Hem. Afr. 1:225. (K)
- 1870 Hypencha: Stal, Sv. Vet. Akad. Handl. 9(1):68. (S)
- 1889 Hypencha: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):59. (S, D)
- 1893 Hypencha: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
- 1902 Hypencha: Distant, Fauna Brit. India, Rh. 1:257, 260. (K, S, D)
- 1903 Hypencha: Kirkaldy, Entomol. 36(484):231. (Tsp)
- 1909 Hypencha: Kirkaldy, Cat. Hem. 1:351. (S)
- 1956 Hypencha: Miller, Biol. Het. ed. 1:45. (Dn)
- 1970 Hypencha: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 9, 15. (K, D)
- 1971 Hypencha: Miller, Biol. Het. 54. (Dn)

Hypencha aeroplana Bergroth, 1922

- 1922a Hypencha aeroplana Bergroth, Ann. Soc. Ent. Belg. 61:376-377, fig.

Distribution: Malay Peninsula.

Hypencha alata Breddin, 1905

- 1905 Hypencha alata Breddin, Mitt. Nat. Mus. Hamb. 22:210-211.
- 1908 Hypencha alata: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 Hypencha alata: Kirkaldy, Cat. Hem. 1:351. (L)
- 1922 Hypencha alata: Bergroth, J. Straits Soc. 83:78. (R)
- 1945 Hypencha alata: Blöte, Zool. Meded. 25:296. (R)

Distribution: Borneo, Malaysia (Banggail.); Sumatra.

Hypencha apicalis (Lepeletier & Serville, 1825)

- 1825 Tessaratomya apicalis Lepeletier & Serville, Enc. Meth. 10:591.
- 1835 Tessaratomya apicalis: Burmeister, Handb. Ent. 2:351. (Dn)
- 1843 Hypencha apicalis: Amyot & Serville, Hist. Nat. Ins. Hem. 166. (Dn, S)

- 1851 Hypencha apicalis: Herrich-Schäffer, Wanz. Ins. 9:309. (L)
 1851 Tessaratomia picea Dallas, List. Hem. 1:341. (syn. by Vollenhoven, 1868)
 1859 Tessaratomia picea: Dohrn, Cat. Hem. :21. (L)
 1859 Hypencha apicalis: Dohrn, Cat. Hem. :21. (L)
 1862 Hypencha reriki Ellenrieder, Nat. Tijds. Ned. Ind. 24:160-161, pl. 5 fig. 30. (syn. by Vollenhoven, 1868)
 1863 Hypencha apicalis: Stål, Trans. Ent. Soc. Lond. (3)1:596.
 1868 Tessaratomia (sic) apicalis: Vollenhoven, Faune Ent. Indo-Neerl. 3:26-27. (S, D)
 1868 Tessaratomia (sic) apicalis: Walker, Cat. Het. 3:462. (S, R)
 1868 Tessaratomia (sic) reriki: Walker, Cat. Het. 3:462. (L)
 1868 Tessaratomia (sic) semicuprea Walker, Cat. Het. 3:465. (syn. by Distant, 1900)
 1870 Hypencha apicalis: Stål, Sv. Vet. Akad. Handl. 9(1):68-69. (S)
 1889 Hypencha apicalis: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):60. (S, D)
 1893 Hypencha apicalis: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1893 Hypencha? semicuprea: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)
 1900 Hypencha apicalis: Distant, Ann. Mag. Nat. Hist. (7)6:61, 63. (S)
 1903 Hypencha apicalis: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 Hypencha apicalis: Kirkaldy, Cat. Hem. 1:351. (S)
 1923 Hypencha apicalis: Lehmann, Zool. Anz. 57(7/8):180. (R)
 1945 Hypencha apicalis: Blöte, Zool. Meded. 25:296. (R)
 1970 Hypencha apicalis: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):9, 12, 13, figs. 24-26. (K; Ge)

Distribution: Borneo, Java, Sumatra.

Hypencha luctuosa Stål, 1863

- 1863 Hypencha luctuosa Stål, Trans. Ent. Soc. Lond. (3)1:596.
 1868 Tessaratomia (sic) luctuosa: Walker, Cat. Het. 3:463. (R)
 1870 Hypencha luctuosa: Stål, Sv. Vet. Akad. Handl. 9(1):69. (L)
 1889 Hypencha luctuosa: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):59-60. (S, D)
 1893 Hypencha luctuosa: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1902 Hypencha luctuosa: Distant, Fauna Brit. India, Rh. 1:260, fig. 165. (D, T)
 1909 Hypencha luctuosa: Kirkaldy, Cat. Hem. 1:351. (S)

Distribution: Burma.

Hypencha opposita (Walker, 1868)

- 1868 Tessaratomia (sic) opposita Walker, Cat. Het. 3:466.
 1900 Hypencha opposita: Distant, Ann. Mag. Nat. Hist. (7)6:61, 63. (Ts, R)
 1909 Hypencha opposita: Kirkaldy, Cat. Hem. 1:351. (L)
 1956 Hypencha opposita: Miller, Biol. Het. ed. 1:28-29. (stridulation)
 1970 Hypencha opposita: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):fig. 47. (spermatheca)

Distribution: Malay Peninsula.

Hypencha opthalmica Stål, 1863

- 1863 Hypencha opthalmica Stål, Trans. Ent. Soc. Lond. (3)1:596.
 1868 Tessaratomia (sic) ophthalmica: Walker, Cat. Het.

3:463. (L)

- 1870 Hypencha opthalmica: Stål, Sv. Vet. Akad. Handl. 9(1):69. (R)
 1889 Hypencha opthalmica: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):60-61. (S, D)
 1893 Hypencha opthalmica: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1909 Hypencha opthalmica: Kirkaldy, Cat. Hem. 1:351. (L)
 1922 Hypencha opthalmica: Bergroth, J. Straits Soc. 83:78. (R)
 1945 Hypencha opthalmica: Blöte, Zool. Meded. 25:296. (R)

Distribution: Borneo, Malay Peninsula, Sumatra.

Hypencha rerika Ellenrieder, 1862 — see Hypencha apicalis

Hypencha semicuprea (Walker, 1868) — see Hypencha apicalis

Mecanum Amyot & Serville, 1843 -- see Mucanum

Mucanum Amyot & Serville, 1843

Type species: Tessaratomia canaliculata Lepeletier & Serville, 1825, by monotypy.

- 1843 Mucanum Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 163-164. (K)
 1846 Mucanum: Agassiz, Nomen. Zool. Add. 9. (Ety)
 1851 Mucanum: Dallas, List. Hem. 1:317, 338. (K)
 1851 Mecanum (sic): Herrich-Schäffer, Wanz. Ins. 9:284. (K)
 1865 Mucanum: Stål, Hem. Afr. 1:224. (K)
 1868 Mucanum: Vollenhoven, Faune Ent. Indo-Neerl. 3:21.
 1870 Mucanum: Stål, Sv. Vet. Akad. Handl. 9(1):65. (S)
 1893 Mucanum: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
 1903 Mucanum: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 Mucanum: Kirkaldy, Cat. Hem. 1:349. (L)
 1956 Mucanum: Miller, Biol. Het. ed. 1:45. (Dn)
 1970 Mucanum: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, 10, 15. (K, D)
 1971 Mucanum: Miller, Biol. Het. :54. (Dn)
 1972 Mucanum: Jordan, Handb. Zool. 4(2)2/20:39. (L)

Mucanum canaliculatum (Lepeletier & Serville, 1825)

- 1825 Tessaratomia canaliculatum Lepeletier & Serville Enc. Meth. 10:590.
 1837 Tessaratomia canaliculatum: Spinola, Essai: 342. (Ts?)
 1843 Mucanum canaliculatum: Amyot & Serville, Hist. Nat. Ins. Hem.:164. (Dn)
 1851 Mucanum canaliculatum: Herrich-Schäffer, Wanz. Ins. 9:309. (L)
 1851 Mucanum canaliculatum: Dallas, List. Hem. 1:338. (S, R)
 1859 Mucanum canaliculatum: Dohrn, Cat. Hem. :20. (L)
 1868 Mucanum canaliculatum: Vollenhoven, Faune Ent. Indo-Neerl. 3:21-22. (S, D)
 1868 Mucanum canaliculatum: Walker, Cat. Het. 3:459. (R)
 1870 Mucanum canaliculatum: Stål, Sv. Vet. Akad. Handl. 9(1):65. (S)
 1893 Mucanum canaliculatum: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
 1903 Mucanum canaliculatum: Kirkaldy, Entomol. 36(484):231. (Tsp)
 1909 Mucanum canaliculatum: Kirkaldy, Cat. Hem. 1:349. (S)

- 1945 Mucanum canaliculatum: Blöte, Zool. Meded. 25:291.
(R)

Distribution: Java.

Mucanum muciligerum Stal, 1858

- 1858 Mucanum muciligerum Stal, Öfv. Vet. Akad. Förh. 15:438.
1863 Mucanum muciligerum: Stal, Trans. Ent. Soc. Lond. (3):1:594.
1868 Mucanum muciligerum: Vollenhoven, Faune Ent. Indo-Neerl. 3:22-23. (S, Dn)
1868 Mucanum muciligerum: Walker, Cat. Het. 3:459. (R)
1870 Mucanum muciligerum: Stal, Sv. Vet. Akad. Handl. 9(1):66. (S, R))
1871 Mucanum muciligerum: Stal, Öfv. Vet. Akad. Förh. 27(7):642. (R)
1893 Mucanum muciligerum: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
1909 Mucanum muciligerum: Kirkaldy, Cat. Hem. 1:349. (S)
1923 Mucanum muciligerum (sic): Lehmann, Zool. Anz. 57(7/8):180. (R)
1945 Mucanum muciligerum: Blöte, Zool. Meded. 25:292. (L)
1972 Mucanum muciligerum: Jordan, Handb. Zool. 4(2)/20:fig. 84. (fig. only)

Distribution: Java, Philippines.

Mucanum patibulum Vollenhoven, 1868

- 1868 Mucanum patibulum Vollenhoven, Faune Ent. Indo-Neerl. 3:22, pl. 3 fig. 1.
1868 Mucanum patibulum: Walker, Cat. Het. 3:459. (R)
1870 Mucanum patibulum: Stal, Sv. Vet. Akad. Handl. 9(1):65. (R)
1893 Mucanum patibulum: Lethierry & Severin, Cat. Gen. Hem. 1:226. (L)
1900b Mucanum patibulum: Breddin, Stett. Ent. Ztg. 63:331. (R)
1905 Mucanum patibulum: Breddin, Mitt. Nat. Mus. Hamb. 22:210. (R)
1907a Mucanum patibulum: Schouteden, Notes Leyden Mus. 30:44. (Ts)
1909 Mucanum patibulum: Kirkaldy, Cat. Hem. 1:349. (L)
1945 Mucanum patibulum: Blöte, Zool. Meded. 25:292. (T, R)
1970 Mucanum patibulum: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):10, 12, 13, figs. 27-29, 48 (& Ge)

Distribution: Borneo, Java, Malaysia (Malaysia, Banggi I.), Moluccas, Sarawak, Sumatra.

Mucanum relandii Eilenrieder, 1862 — see Pygoplatys relandii

Pygoplatys Dallas, 1851

Type species: Pygoplatys validus Dallas, 1851, designated by Distant, 1902

Pygoplatys (Odontoteuchus): Pygoplatys thoreyi Dohrn, 1863, designated by Kirkaldy, 1909

- 1851 Pygoplatys Dallas, List. Hem. 1:317, 338-339. (K)
1865 Pygoplatys: Stal, Hem. Afr. 1:225. (K)
1868 Pygoplatys: Vollenhoven, Faune Ent. Indo-Neerl. 3:23. (D)
1870 Pygoplatys: Stal, Sv. Vet. Akad. Handl. 9(1):69. (S)
1871 Pygoplatys (Pygoplatys) Stal, Öfv. Vet. Akad. Förh. 27(7):642
1871 Pygoplatys (Odontoteuchus) Stal, Öfv. Vet. Akad. Förh. 27(7):643. (syn. by Kumar & Ghauri, 1970)
1889 Pygoplatys: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):61.

(S, D)

- 1901 Pygoplatys: Breddin, Abh. Naturf. Ges. Halle 24:159, 171.
1902 Pygoplatys: Distant, Fauna Brit. India, Rh. 1:257, 261.
1909 Pygoplatys: Kirkaldy, Cat. Hem. 1:XXXVI, 351. (Tsp)
1922a Pygoplatys: Bergroth, Ann. Soc. Ent. Belg. 61:376. (diversity of humeri)
1923 Pygoplatys: Lehmann, Zool. Anz. 57(7/8):181. (subgen. & spp. listed)
1948 Pygoplatys: Hoffmann, Lingnan Sci. J. 22(1-4):31-32. (S)
1956 Pygoplatys: Miller, Biol. Het. ed. 1:45. (Dn)
1970 Pygoplatys: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):4, 5, 15. (K, D, S)
1971 Pygoplatys: Miller, Biol. Het. :54. (Dn)

Pygoplatys subgenus Odontoteuchus Stal, 1871 — see Pygoplatys

Pygoplatys subgenus Pygoplatys Dallas, 1851 — see Pygoplatys

Pygoplatys acutus Dallas, 1851

- 1851 Pygoplatys acutus Dallas, List. Hem. 1:340.
1859 Pygoplatys acutus: Dohrn, Cat. Hem. :21. (L)
1868 Pygoplatys roseus Vollenhoven, Faune Ent. Indo-Neerl. 3:24. (syn. by Stal, 1870)
1868 Pygoplatys acutus: Walker, Cat. Het. 3:460. (L)
1870 Pygoplatys acutus: Stal, Sv. Vet. Akad. Handl. 9(1):69. (S)
1889 Pygoplatys acutus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):61-62. (S, D)
1893 Pygoplatys acutus: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
1902 Pygoplatys acutus: Distant, Fauna Brit. India, Rh. 1:261, fig. 166. (S, D, R)
1907a Pygoplatys acutus: Schouteden, Notes Leyden Mus. 30:44. (T, S)
1909 Pygoplatys (Pygoplatys) acutus: Kirkaldy, Cat. Hem. 1:352. (S)
1945 Pygoplatys (Pygoplatys) acutus: Blöte, Zool. Meded. 25:296. (R)
1945 Pygoplatys (Pygoplatys) roseus: Blöte, Zool. Meded. 25:298. (R)

Distribution: Burma, India, Moluccas, Sumatra.

Pygoplatys auropunctatus Blöte, 1945

- 1945 Pygoplatys (Pygoplatys) auropunctatus Blöte, Zool. Meded. 25:297. (R)
1948 Pygoplatys auropunctatus: Hoffmann, Lingnan Sci. J. 22(1-4):32. (L)

Distribution: Laos.

Pygoplatys bovillus Stal, 1871

- 1871 Pygoplatys bovillus Stal, Öfv. Vet. Akad. Förh. 27(7):643
1873 Pygoplatys bovillus Walker, Cat. Het. Suppl. 24. (L)
1893 Pygoplatys bovillus: Distant, Ann. Mag. Nat. Hist. (6)11:432. (cf. Pygoplatys lunatus)
1893 Pygoplatys bovillus: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)
1909 Pygoplatys (Pygoplatys) bovillus: Kirkaldy, Cat. Hem. 1:352. (L)

Distribution: Philippines.

Pygoplatys celebensis Breddin, 1901

- 1901 Pygoplatys celebensis Breddin, Abh. Naturf. Ges. Halle 24:14, 62-63.

- 1908 Pygoplatys celebensis: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 Pygoplatys (Pygoplatys) celebensis: Kirkaldy, Cat. Hem. 1:352. (L)
 1945 Pygoplatys (Odontoteuchus) celebensis: Blöte, Zool. Meded. 25:298. (Ts)
 1971 Pygoplatys celebensis: Gaedike, Beitr. Ent. 21(1-2):82 (T)

Distribution: Sulawesi (Celebes).

Pygoplatys cribratus (Walker, 1868)

- 1868 Piezosternum cribratum Walker, Cat. Het. 3:458.
 1868 Pygoplatys trucidus Walker, Cat. Het. 3:461. (syn. by Distant, 1900)
 1893 Pygoplatys trucidus: Distant, Ann. Mag. Nat. Hist. (6)11:431. (cf. Pygoplatys tauriformis)
 1893 Pygoplatys cribratus: Distant, Ann. Mag. Nat. Hist. (6)11:432. (Dn, R)
 1893 Pygoplatys cribratus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1893 Pygoplatys trucidus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1900 Pygoplatys cribratus: Distant, Ann. Mag. Nat. Hist. (7)6:61, 63.
 1909 Pygoplatys (Pygoplatys) cribratus: Kirkaldy, Cat. Hem. 1:352. (S)
 1945 Pygoplatys (Pygoplatys) trucidus: Blöte, Zool. Meded. 25:298.

Distribution: Borneo, Moluccas.

Pygoplatys firmatus (Walker, 1868)

- 1868 Piezosternum firmatus Walker, Cat. Het. 3:458.
 1889 Piezosternum ?firmatum: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):83. (D)
 1893 Pygoplatys firmatus: Distant, Ann. Mag. Nat. Hist. (6)11:432. (Dn, R)
 1893 Pygoplatys firmatus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1900 Pygoplatys firmatus: Distant, Ann. Mag. Nat. Hist. (7)6:63. (Ts)
 1903a Pygoplatys firmatus: Distant, Fasc. Malay. Zool. 1(2):237. (S, R)
 1909 Pygoplatys (Pygoplatys) firmatus: Kirkaldy, Cat. Hem. 1:352. (L)

Distribution: Malaysia, Moluccas.

Pygoplatys forticornis (Walker, 1868)

- 1868 Tesseratoma (sic) forticornis Walker, Cat. Het. 3:465
 1893 Pygoplatys forticornis: Distant, Ann. Mag. Nat. Hist. (6)11:432. (Dn, R)
 1893 Pygoplatys forticornis: Lethierry & Severin, Cat. Gen. Hem. 1:229.
 1900 Pygoplatys forticornis: Distant, Ann. Mag. Nat. Hist. (7)6:63. (Ts)
 1909 Pygoplatys (Pygoplatys) forticornis: Kirkaldy, Cat. Hem. 1:352. (L).

Distribution: Borneo.

Pygoplatys haedulus Stål, 1871

- 1871 Pygoplatys (Odontoteuchus) haedulus Stål, Öfv. Vet. Akad. Förh. 27(7):644.
 1873 Pygoplatys haedulus: Walker, Cat. Het. Suppl. 25. (L)
 1893 Pygoplatys haedulus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 Pygoplatys (Odontoteuchus) haedulus: Kirkaldy, Cat. Hem. 1:352. (L)
 1923 Pygoplatys haedulus: Lehmann, Zool. Anz. 57(7/8):180. (R)

Distribution: Philippines.

Pygoplatys ingenuus (Walker, 1868)

- 1868 Piezosternum ingenuum Walker, Cat. Het. 3:459.
 1889 Piezosternum? ingenuus: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):83. (D)
 1893 Pygoplatys ingenus (sic): Distant, Ann. Mag. Nat. Hist. (6)11:432. (Dn)
 1893 Pygoplatys ingenus (sic): Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1900 Pygoplatys ingenus (sic): Distant, Ann. Mag. Nat. Hist. (7)6:63. (Ts)
 1909 Pygoplatys (Pygoplatys) ingenuus: Kirkaldy, Cat. Hem. 1:352. (S)

Distribution: unknown.

Pygoplatys lancifer Walker, 1868

- 1868 Pygoplatys lancifer Walker, Cat. Het. 3:460.
 1893 Pygoplatys lancifer: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1900 Pygoplatys lancifer: Distant, Ann. Mag. Nat. Hist. (7)6:62. (Ts)
 1909 Pygoplatys (Pygoplatys) lancifer: Kirkaldy, Cat. Hem. 1:352.
 1945 Pygoplatys lancifer: Blöte, Zool. Meded. 25:297. (R)
 1956 Pygoplatys lancifer: Miller, Biol. Het. ed. 1: pl. 1 fig. 17 (fig. only)
 1970 Pygoplatys lancifer: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):12, fig. 42. (Ge)
 1971 Pygoplatys lancifer: Miller, Biol. Het.: pl. 1 fig. 17. (figure only)

Distribution: Borneo.

Pygoplatys longiceps Stål, 1871

- 1871 Pygoplatys (Odontoteuchus) longiceps Stål, Öfv. Vet. Akad. Förh. 27(7):643.
 1873 Pygoplatys longiceps: Walker, Cat. Het. Suppl. 25. (L)
 1893 Pygoplatys longiceps: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 Pygoplatys (Odontoteuchus) longiceps: Kirkaldy, Cat. Hem. 1:352. (L)
 1923 Pygoplatys longiceps: Lehmann, Zool. Anz. 57(7/8):180. (R)
 1945 Pygoplatys (Odontoteuchus) longiceps: Blöte, Zool. Meded. 25:298. (R)

Distribution: Philippines.

Pygoplatys lunatus Distant, 1893

- 1893 Pygoplatys lunatus Distant, Ann. Mag. Nat. Hist. (6)11:431-432.
 1893 Pygoplatys lunatus: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 Pygoplatys (Pygoplatys) lunatus: Kirkaldy, Cat. Hem. 1:352. (L)
 1945 Pygoplatys (Pygoplatys) lunatus: Blöte, Zool. Meded. 25:297. (R)

Distribution: Borneo

Pygoplatys merinjakensis Distant, 1914

- 1914a Pygoplatys merinjakensis Distant, Ann. Mag. Nat. Hist. (8)14:335.

Distribution: Borneo.

Pygoplatys minax Vollenhoven, 1868

- 1868 Pygoplatys minax Vollenhoven, Faune Ent. Indo-Neerl. 3:23-34, pl. 3 fig. 3.
 1868 Pygoplatys minax: Walker, Cat. Het. 3:460. (L)
 1870 Pygoplatys minax: Stål, Sv. Vet. Akad. Handl. 9(1):69.

- (L)
 1889 *Pygoplatys minax*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):62. (D)
 1893 *Pygoplatys minax*: Lethierry & Severin, Cat. Gen. Hem. 1:229.
 1903a *Pygoplatys minax*: Distant, Fasc. Malay. Zool. 1(2):237. (R)
 1907a *Pygoplatys minax*: Schouteden, Notes Leyden Mus. 30:44. (T, Ts)
 1909 *Pygoplatys (Pygoplatys) minax*: Kirkaldy, Cat. Hem. 1:352.
 1945 *Pygoplatys minax*: Blöte, Zool. Meded. 25:297. (R)
 1970 *Pygoplatys minax*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):13, fig. 45. (Ge)
Distribution: Borneo, India, Malaysia, Sumatra.
- Pygoplatys montanus* Distant, 1900
 1900c *Pygoplatys montanus* Distant, Trans. Ent. Soc. Lond. 1900(4):696-697.
 1908 *Pygoplatys montanus*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 *Pygoplatys (Pygoplatys) montanus*: Kirkaldy, Cat. Hem. 1:352. (L)
Distribution: Borneo.
- Pygoplatys obtusus* Blöte, 1945
 1945 *Pygoplatys obtusus* Blöte, Zool. Meded. 25:297-298.
Distribution: Borneo.
- Pygoplatys ralandii* (Ellenreider, 1862)
 1862 *Mucanum ralandii* Ellenreider, Nat. Tijds. Ned. Ind. 24:159-160, pl. 5 fig. 29.
 1868 *Pygoplatys ralandii*: Vollenhoven, Faune Ent. Indo-Neerl. 3:24. (D, H)
 1868 *Mucanum ralandii*: Walker, Cat. Het. 3:459. (L)
 1870 *Pygoplatys ralandii*: Stål, Sv. Vet. Akad. Handl. 9(1):69. (S)
 1873 *Pygoplatys ralandii*: Walker, Cat. Het. Suppl. 26. (S)
 1893 *Pygoplatys ralandii*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (S)
 1900b *Pygoplatys ralandii* (sic): Breddin, Stett. Ent. Ztg. 61:331.
 1909 *Pygoplatys (Pygoplatys) ralandii*: Kirkaldy, Cat. Hem. 1:352. (S, H)
Distribution: Sumatra.
- Pygoplatys roseus* Vollenhoven, 1868 — see *Pygoplatys acutus*
- Pygoplatys rosulentus* Stål, 1871
 1871 *Pygoplatys (Odontoteuchus) rosulentus* Stål, Öfv. Vet. Akad. Förh. 27(7):644.
 1873 *Pygoplatys rosulentus*: Walker, Cat. Het. Suppl. 25. (L)
 1893 *Pygoplatys rosulentus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Odontoteuchus) rosulentus*: Kirkaldy, Cat. Hem. 1:352. (L)
 1923 *Pygoplatys rosulentus*: Lehmann, Zool. Anz. 57(7/8):180-181. (R)
Distribution: Philippines
- Pygoplatys shelfordi* Distant, 1901
 1901b *Pygoplatys shelfordi* Distant, Trans. Ent. Soc. Lond. 1901(4):587.
 1908 *Pygoplatys shelfordi*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
Distribution: Borneo.
- Pygoplatys subrugosus* Vollenhoven, 1868
 1868 *Pygoplatys subrugosus* Vollenhoven, Faune Ent. Indo-Neerl. 3:23, pl. 3 fig. 2.
 1868 *Pygoplatys subrugosus*: Walker, Cat. Het. 3:460. (L)
 1870 *Pygoplatys subrugosus*: Stål, Sv. Vet. Akad. Handl. 9(1):69. (L)
 1893 *Pygoplatys subrugosus*: Lethierry & Severin, Cat. Gen. Hem. 1:229.
 1907a *Pygoplatys subrugosus*: Schouteden, Notes Leyden Mus. 30:44. (T, Ts)
 1909 *Pygoplatys (Pygoplatys) subrugosus*: Kirkaldy, Cat. Hem. 1:352. (L)
 1945 *Pygoplatys (Pygoplatys) subrugosus*: Blöte, Zool. Meded. 25:298. (R, T)
 1970 *Pygoplatys subrugosus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):12, fig. 43. (Ge)
Distribution: Moluccas (Amboina I, Buru I.).
- Pygoplatys tauriformis* Distant, 1893
 1893 *Pygoplatys tauriformis* Distant, Ann. Mag. Nat. Hist. 6(11):431, 432. (cf. *Pygoplatys lunatus*)
 1893 *Pygoplatys tauriformis*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1902 *Pygoplatys tauriformis*: Distant, Fauna Brit. India, Rh. 1:261-262. (D)
 1909 *Pygoplatys (Pygoplatys) lunatus*: Kirkaldy, Cat. Hem. 1:352. (S)
Distribution: Burma.
- Pygoplatys thoreyi* Dohrn, 1863
 1863 *Pygoplatys? thoreyi* Dohrn, Stett. Ent. Ztg. 24:350.
 1868 *Pygoplatys thoreyi*: Walker, Cat. Het. 3:460. (L)
 1870 *Pygoplatys thoreyi*: Stål, Sv. Vet. Akad. Handl. 9(1):70. (L)
 1871 *Pygoplatys (Odontoteuchus) thoreyi*: Stål, Öfv. Vet. Akad. Förh. 27(7):643. (K)
 1873 *Pygoplatys thoreyi*: Walker, Cat. Het. Suppl. 24. (S)
 1893 *Pygoplatys thoreyi*: Lethierry & Severin, Cat. Gen. Hem. 1:229.
 1909 *Pygoplatys (Odontoteuchus) thoreyi*: Kirkaldy, Cat. Hem. 1:352. (L)
 1923 *Pygoplatys thoreyi*: Lehmann, Zool. Anz. 57(7/8):181. (R)
 1970 *Pygoplatys thoreyi*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):12, 13, fig. 44. (Ge)
Distribution: Philippines.
- Pygoplatys trucidus* Walker, 1868 — see *Pygoplatys cribratus*
- Pygoplatys validus* Dallas, 1851
 1851 *Pygoplatys validus* Dallas, List. Hem. 1:339-340, pl. 11 fig. a-d.
 1859 *Pygoplatys validus*: Dohrn, Cat. Hem. 21. (L)
 1868 *Pygoplatys validus*: Walker, Cat. Het. 3:459. (L)
 1870 *Pygoplatys validus*: Stål, Sv. Vet. Akad. Handl. 9(1):69. (L)
 1893 *Pygoplatys validus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Pygoplatys) validus*: Kirkaldy, Cat. Hem. 1:352. (L)
 1945 *Pygoplatys (Pygoplatys) validus*: Blöte, Zool. Meded. 25:298. (R)
 1970 *Pygoplatys validus*: Kumar & Ghauri, Dt. Ent. Z. (N.F.) 17(1-3):5, figs. 9-11, 41. (Ge)
Distribution: Borneo.
- Pygoplatys zonatus* Stål, 1863
 1863 *Pygoplatys zonatus* Stål, Trans. Ent. Soc. Lond. (3)1:595.

- 1868 *Pygoplatys zonatus*: Walker, Cat. Het. 3:460. (R)
 1870 *Pygoplatys zonatus*: Stål, Sv. Vet. Akad. Handl. 9(1):69. (L)
 1893 *Pygoplatys zonatus*: Lethierry & Severin, Cat. Gen. Hem. 1:229. (L)
 1909 *Pygoplatys (Pygoplatys) zonatus*: Kirkaldy, Cat. Hem. 1:352. (L)
Distribution: Borneo.

***Siphnus* Stål, 1863**

Type species: *Siphnus alcides* Stål, 1863, designated by Kirkaldy, 1909.

- 1863 *Siphnus*: Stål, Trans. Ent. Soc. Lond. (3) 1:597.
 1865 *Siphnus*: Stål, Hem. Afr. 1:225. (K)
 1868 *Siphnus*: Walker, Cat. Het. 3:467. (L)
 1870 *Siphnus*: Stål, Sv. Vet. Akad. Handl. 9(1):68. (S)
 1889 *Siphnus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):57-58. (S, D)
 1893 *Siphnus*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1909 *Siphnus*: Kirkaldy, Cat. Hem. 1:XXXVI, 351. (Tsp)
 1956 *Siphnus*: Miller, Biol. Het. ed. 1:45. (Dn)
 1970 *Siphnus*: Kumar & Ghauri, Dt. Ent. Z. (N>F.) 17(1-3):4, 5-6, 15. (K, D, Tsp)
 1971 *Siphnus*: Miller, Biol. Het. :54. (Dn)

***Siphnus alcides* Stål, 1863**

- 1863 *Siphnus alcides*: Stål, Trans. Ent. Soc. Lond. (3) 1:597.
 1868 *Siphnus alcides*: Walker, Cat. Het. 3:467. (R)
 1870 *Siphnus alcides*: Stål, Sv. Vet. Akad. Handl. 9(1): 68. (R)
 1889 *Siphnus alcides*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):58. (S, D)
 1893 *Siphnus alcides*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1909 *Siphnus alcides*: Kirkaldy, Cat. Hem. 1:351. (L)
 1935 *Siphnus alcides*: Hoffmann, Lingnan Univ. Sci. Bull. 7:132. (S, R)
 1945 *Siphnus alcides*: Blote, Zool. Meded. 25:295. (R)
 1968 *Siphnus alcides*: Cobben, Evol. Trends Het. Eggs: 112, 114 fig. 116. (E)
 1981 *Siphnus alcides*: Hinton, Biol. Ins. Eggs. 1:594. (E)
Distribution: Cambodia, Vietnam.

***Siphnus dilatatus* Walker, 1868**

- 1868 *Siphnus dilatatus*: Walker, Cat. Het. 3:467.
 1889 *Siphnus dilatatus*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):58-59. (D)
 1893 *Siphnus dilatatus*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1900 *Siphnus dilatatus*: Distant, An. Mag. Nat. Hist. (7)6:62. (Ts)
 1909 *Siphnus dilatatus*: Kirkaldy, Cat. Hem. 1:351(L)
 1970 *Siphnus dilatatus*: Kumar & Ghauri, Dt. Ent. Z. (N F.) 17(1-3):5-6, figs. 12-14 (o Ge)
Distribution: Thailand.

***Siphnus hector* Stål, 1863**

- 1863 *Siphnus hector*: Stål, Trans. Ent. Soc. Lond. (3) 1:597.
 1868 *Siphnus hector*: Walker, Cat. Het. 3:467. (L)
 1870 *Siphnus hector*: Stål, Sv. Vet. Akad. Handl. 9(1):68. (R, Dn)
 1889 *Siphnus hector*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):58. (S, D)
 1893 *Siphnus hector*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (S)
 1909 *Siphnus hector*: Kirkaldy, Cat. Hem. 1:351.

Distribution: Ligor, Malaysia, Moluccas.

***Siphnus hercules* Blote, 1945**

- 1945 *Siphnus hercules*: Blote, Zool. Meded. 25:295-596.
Distribution: Borneo.

***Tessaratoma* Lepeletier & Serville, 1825**

Type species: *Tessaratoma*: *Tessaratoma papillosa* Drury, [= *Cimex papillosus* Drury, 1770] designated by Distant 1902

- 1825 *Tessaratoma*: Lepeletier & Serville, Enc. Meth. 10:590.
 1827 *Tessaratoma*: Berthold, Latreille's Nat. Fam. Thier.:416. (K)
 1829 *Tessaratomia* (sic): Latreille, Regne An. 5:195. (lists spp. originally included)
 1833 *Tessaratomia*: Laporte, Mag. Zool. (Guérin), 2:55, 59. (K, D)
 1834 *Tessaratomia* (sic): Burmeister, Silb. Rev. Ent. 2:14, 15, 18, 19, 21, pl. 16 fig. 2 (D)
 1835 *Tessaratomia* (sic): Boisdual, Voy. Astrolabe Ent. 2:631. (L)
 1835 *Tessaratomia* (sic): Burmeister, Handb. Ent. 2:347, 350. (K, D)
 1835 *Tessaratomia*: Hahn, Wanz. Ins. Nurnberg. 2:122-123. (D)
 1835 *Tessaratomia*: Brullé, Hist. Nat. Ins. 9:394, 395. (K, Dn)
 1837 *Tessaratomia*: Spinola, Essai: 340-342. (K,D)
 1840 *Tessaratomia* (sic): Blanchard, Hist. Nat. Ins. 3:142. (cf. *Oncomeris*)
 1843 *Tessaratomia* (sic): Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 164-165. (K, D)
 1846 *Tessaratomia*: Agassiz, Nomen. Zool.:19, Addenda:13. (N)
 1850 *Tessaratomia* (sic): Spinola, Gen. Ins. Artr.:32. (K)
 1851 *Tessaratomia*: Dallas, List. Hem. 1:317, 340. (K)
 1851 *Tessaratomia* (sic): Herrich-Schäffer, Wanz. Ins. 9:284. (K)
 1852 *Tessaratomia* (sic): Spinola, Mem. Soc. Ital. Modena 25(1):72. (K)
 1865 *Tessaratomia*: Stål, Hem. Afr. 1:224, 229. (K, D)
 1868 *Tessaratomia* (sic): Vollenhoven, Faune Ent. Indo-Neerl. 3:25. (D)
 1870 *Tessaratomia*: Stål, Sv. Vet. Akad. Handl. 9(1):66. (S)
 1889 *Tessaratomia*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):53-54. (S, D)
 1893 *Tessaratomia*: Lethierry & Severin, Cat. Gen. Hem. 1:226. (S)
 1902 *Tessaratomia*: Distant, Fauna Brit. India. Rh. 1:257. (K, S, D)
 1905 *Tessaratomia*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):221-222. (S, D, Ks)
 1909 *Tessaratomia*: Kirkaldy, Cat. Hem. 1:349. (S)
 1911 *Tessaratomia*: Muir & Kershaw, Psyche 18:3, pl. 2, fig. 7. (M)
 1935 *Tessaratomia*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):105, 128. (K, S, D)
 1935 *Tessaratomia*: Tang, Cat. Ins. Sin. 2:363. (S)
 1952a *Tessaratomia*: Villiers, Init. Afr. 9:82-83. (D)
 1957 *Tessaratomia*: Zia, Acta Ent. Sin. 7:425, 426. (K, S, D)
 1972 *Tessaratomia*: Jordan, Handb. Zool. 4(2)2/20:39. (L)
 1977 *Tessaratomia*: Hsiao et al., Handb. Chinese Hem.-Het. 1:64, 65-66. (K, Ks)

***Tessaratomia absimilis* Distant, 1893**

- 1893 *Tessaratomia absimilis* Distant, Ann. Mag. Nat. Hist. (6)11:431.

- 1893 *Tessaratoma absimilis*: Lethierry & Severin, Cat. Gen. Hem. 1:226.
 1905 *Tessaratoma absimilis*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 225, fig. 82. (K, S, D)
 1909 *Tessaratoma absimilis*: Kirkaldy, Cat. Hem. 1:349. (S)
Distribution: East Africa.

Tessaratoma aethiops Distant, 1877

- 1877 *Tessaratoma* (sic) *aethiops* Distant, Ent. Mo. Mag. 14(159):62-63. (K)
 1882 *Tessaratoma aethiops*: Waterhouse, Aid. Ident. Ins. 1, pl. 49.
 1892 *Tessaratoma aethiops*: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)
 1893 *Tessaratoma aethiops*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
 1894 *Tessaratoma hornimani*: Montandon, Ann. Soc. Ent. Belg. 38(1893):634. (misdet. sec. Schouteden, 1905)
 1894 *Tessaratoma aethiops*: Karsch, Stett. Ent. Ztg. 55:100. (R)
 1901 *Tessaratoma aethiops*: Distant, Ann. Soc. Ent. Belg. 45(1):28. (R)
 1904a *Tessaratoma aethiops*: Schouteden, Mem. Soc. Espaq. Hist. Nat. 1:160. (R)
 1904a *Tessaratoma hornimani*: Schouteden, Mem. Soc. Espaq. Hist. Nat. 1:160. (R, misdet. sec. Schouteden, 1905)
 1905 *Tessaratoma aethiops*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):221, 222-223, 224, 274, figs. 75, 76, pl. 5 fig. 3. (K, S, D, R, N)
 1909 *Tessaratoma aethiops*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68. (R)
 1909 *Tessaratoma aethiops*: Kirkaldy, Cat. Hem. 1:349. (S)
 1910 *Tessaratoma aethiops*: Schouteden, Ann. Soc. Ent. Belg. 54:405. (R)
 1911 *Tessaratoma aethiops*: Schouteden, Rev. Zool. Afr. 1:185. (R)
 1921 *Tessaratoma* (sic) *aethiops*: Lehmann, Arch. Naturges. Berlin Abt. 87A(6):38. (cf. *Tessaratoma hornimani*)
 1934 *Tessaratoma aethiops*: Mayné & Ghesquiere, Ann. Gembloux 40(1):12. (R, H)
 1945 *Tessaratoma aethiops*: Blöte, Zool. Meded. 25:292. (R)
 1952a *Tessaratoma aethiops*: Villiers, Init. Afr. 9:83, fig. 105. (Dn, R)
 1956 *Tessaratoma aethiops*: Leston, Bull. I.F.A.N. 18A(2):618. (R)
 1959 *Tessaratoma aethiops*: LePelley, Agric. Ins. E. Afr. 56, 103.
 1966 *Tessaratoma aethiops*: Baggini et al., EOS 42: 9, 10, 14-18. (sgf)
 1967 *Tessaratoma aethiops*: Villiers, Bull. I.F.A.N. (ser. A) 29(4):1807. (R)
 1979 *Tessaratoma aethiops*: Staddon, Adv. Ins. Physiol. 14:362. (sgf)
 1980 *Tessaratoma aethiops*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1981 *Tessaratoma aethiops*: Blum, Chem. Def. Arthr. 58, 113-114, 116, 126, 215. (sgf).

Distribution: Cameroon, Congo, Kenya, Zaire.

Tessaratoma afzelii Stål, 1854

- 1803 *Edessa papillosa*: Fabricius, Syst. Rh. 150. (misdet. sec. Stål, 1856)
 1835 *Tessaratoma* (sic) *papillosa*: Burmeister, Handb. Ent. 2:350-351 (misdet. sec. Stål, 1854)
 1854 *Tessaratoma* (sic) *afzelii* Stål, Öfv. Vet. Akad. Förh. 11(8):233-234.

- 1856 *Tessaratoma* (sic) *afzelii*: Stål, Öfv. Vet. Akad. Förh. 13:63. (Dn, S)
 1859 *Tessaratoma afzelii*: Dohrn, Cat. Hem. 1:21. (S)
 1865 *Tessaratoma afzelii*: Stål, Hem. Afr. 1:229. (D, S, R)
 1868 *Tessaratoma* (sic) *afzelii*: Walker, Cat. Het. 3:463. (S)
 1870 *Tessaratoma afzelii*: Stål, Sv. Vet. Akad. Handl. 9(1):68. (S, R)
 1877 *Tessaratoma* (sic) *afzelii* (sic): Distant, Ent. Mo. Mag. 14(159):63. (K)
 1890 *Tessaratoma afzelii*: Distant, Ann. Soc. Ent. Belg. 34:53. (R)
 1892 *Tessaratoma afzelii*: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)
 1893 *Tessaratoma afzelii*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
 1894 *Tessaratoma afzelii*: Karsch, Stett. Ent. Ztg. 55:100. (R)
 1901 *Tessaratoma afzelii*: Distant, Ann. Soc. Ent. Belg. 45(1):28. (R)
 1903 *Tessaratoma usambarica* Breddin, Soc. Ent. 18:107. (syn. Schouteden, 1905)
 1904 *Tessaratoma niamensis* Schouteden, Ann. Soc. Ent. Belg. 48:143-144. (syn. Schouteden, 1905)
 1905 *Tessaratoma afzelii*: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 226-227, figs. 83-86. (K, S, D, R)
 1909 *Tessaratoma afzelii*: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68. (R)
 1909 *Tessaratoma afzelii*: Kirkaldy, Cat. Hem. 1:349. (S)
 1911 *Tessaratoma afzelii*: Schouteden, Rev. Zool. Afr. 1:185. (R)
 1913 *Tessaratoma afzelii*: Jeannel, Voy. Alluaud Hem. 1:108. (S, R)
 1934 *Tessaratoma afzelii*: Mayné & Ghesquiere, Ann. Gembloux 40(1):
 1945 *Tessaratoma afzelii*: Blöte, Zool. Meded. 25:292. (R)
 1949 *Tessaratoma afzelii*: Villiers, I.F.A.N. Catalogues 5:89. (R)
 1950 *Tessaratoma afzelii*: Villiers, Bull. I.F.A.N. 12(4):938. (R)
 1952b *Tessaratoma afzelii*: Villiers, Mem. I.F.A.N. 19:307. (R)
 1952a *Tessaratoma afzelii*: Villiers, Init. Afr. 9:83. (Dn, R)
 1956 *Tessaratoma afzelii*: Villiers, Ent. Arb. Mus. Gg. Frey 7:213. (R)
 1971 *Tessaratoma usambarica*: Gaedike, Beitr. Ent. 21(1-2):102. (T)
 1980 *Tessaratoma afzelii*: Medler, Mem. Am. Ent. Inst., no. 30:120. (R)
 1982a *Tessaratoma* (sic) *afzelii*: Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Cameroon, Congo, Gabon, Ghana, Guinea, Ivory Coast, Kenya, Liberia, Nigeria, Sierra Leone, Tanzania, Togo, Zaire

Tessaratoma alternata Lapeletier & Serville, 1825 - see *Pycnanum rubens*

Tessaratoma angularis Dohrn, 1863 - see *Tessaratoma javanica*

Tessaratoma apicalis Lapeletier & Serville, 1825 - see *Hypencha apicalis*

Tessaratoma bicornis Lapeletier & Serville, 1825 - see *Eurypleura bicornis*

Tessaratoma canaliculatum Lapeletier & Serville, 1825 — see *Mucanum canaliculatum*

Tessaratoma chinensis (Thunberg, 1783) — see Tessaratoma papillosa

Tessaratoma (sic) clara Walker, 1868 — see Tessaratoma javanica

Tessaratoma conspersa Stål, 1863

- 1863 Tessaratoma conspersa Stål, Trans. Ent. Soc. Lond. (3)1:595.
 1868 Tessaratoma javanica var. stictica Vollenhoven, Faune Ent. Indo-Neerl. 3:26. (authorship attributed to de Haan; syn. with Tessaratoma conspersa)
 1868 Tessaratoma (sic) conspersa: Walker, Cat. Het. 3:462. (R)
 1870 Tessaratoma conspersa: Stål, Sv. Vet. Akad. Handl. 9(1):67. (Ts)
 1893 Tessaratoma conspersa: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
 1901 Tessaratoma conspersa: Breddin, Abh. Naturf. Ges. Halle 24:13, 61. (R, D)
 1907a Tessaratoma conspersa: Schouteden, Notes Leyden Mus. 30:44. (S)
 1909 Tessaratoma conspersa: Kirkaldy, Cat. Hem. 1:349. (S)
 1932 Tessaratoma conspersa: Wu, Mar. Biol. Assoc. China, 1st Ann. Rep. :82. (R)
 1935 Tessaratoma conspersa: Hoffmann, Lingnan Univ. Sci. Bull. 7:130. (S, R)
 1935 Tessaratoma conspersa: Tang, Cat. Ins. Sin. 2:363. (S)
 1945 Tessaratoma conspersa: Blöte, Zool. Meded. 25:292. (R)
 1945 Tessaratoma stictica: Blöte, Zool. Meded. 25:295. (as Nn for Tessaratoma javanica var. stictica Vollenhoven, 1868)
 1948 Tessaratoma conspersa: Hoffmann, Lingnan Sci. J. 22(1-4):29. (China record queried)

Distribution: China (Fujian), Java, Sulawesi (Celebes).

Tessaratoma cornuta Dallas, 1851 — see Embolosterna taurus

Tessaratoma cuprea Westwood, 1837 — see Eusthenes cupreus

Tessaratoma dilatatum Montrouzier, 1855 — see Plisthenes dilatatus

Tessaratoma flavicornis Guérin, 1831 — see Oncomeris flavicornis

Tessaratoma (sic) forticornis Walker, 1868 — see Pygoplatys forticornis

Tessaratoma (sic) furcifera Walker, 1868 — see Tessaratoma javanica

Tessaratoma hornimani Distant, 1877

- 1877 Tessaratoma (sic) hornimani Distant, Ent. Mon. Mag. 14(159):63. (K)
 1882 Tessaratoma hornimani: Waterhouse, Aid. Ident. Ins. 1, pl. 49.
 1891 Tessaratoma hornimani: Bergroth, Rev. Ent. 10:213. (Dn)
 1892 Tessaratoma hornimani: Distant, Ent. Mon. Mag. (2)3(31):188, 189. (Dn)
 1893 Tessaratoma hornimani: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
 1894 Tessaratoma hornimani: Haglund, Öfv. Vet. Akad. Förh. 51(8):406. (Dn, R)

1894 Tessaratoma hornimani: Montandon, Ann. Soc. Ent. Belg. 38(1893):634. (misdet. see Tessaratoma aethiops)

1894 Tessaratoma hornimani: Karsch, Stett. Ent. Ztg. 55:100. (R)

1904 Tessaratoma hornimani: Schouteden, Mem. Soc. Espan. Hist. Nat. 1:160. (R, misdet. see Tessaratoma aethiops)

1905 Tessaratoma hornimani: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 223-224, 274, figs. 77, 78, pl. 5 fig. 2. (K, S, D, R, I)

1909 Tessaratoma hornimani: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68 (R)

1909 Tessaratoma hornimani: Kirkaldy, Cat. Hem. 1:349-350. (S)

1909c Tessaratoma hornimani: Distant, Trans. Zool. Soc. Lond. 19(1)(9-11):73. (R)

1921 Tessaratoma (sic) hornimani: Lehmann, Arch. Naturges. Berlin Abt. 87A(6):28. (cf. Tessaratoma aethiops)

1982a Tessaratoma (sic) hornimani (sic): Linnavuori, Acta Zool. Fenn. 163:11. (R)

Distribution: Cameroon, Congo, Zaire (Ruwendzori).

Tessaratoma indica Breddin, 1909

- 1909 Tessaratoma indica Breddin, Ann. Soc. Ent. Belg. 53:282. (Diagnosis)
 1912 Tessaratoma indica: Breddin, Arch. Naturges. Berlin. 78A(6):80-81. (as n. sp.)
 1918 Tessaratoma indica: Distant, Faun. Brit. India Rh. 7:147. (Ts)
 1945 Tessaratoma indica: Blöte, Zool. Meded. 25:293.
 1971 Tessaratoma indica: Gaedike, Beitr. Ent. 21(1-2):88. (T)

Distribution: Sri Lanka.

Tessaratoma indicta Distant, 1890

- 1890b Tessaratoma indicta Distant, Proc. Zool. Soc. Lond. 1890(3):477.
 1892 Tessaratoma indicta: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)
 1893 Tessaratoma indicta: Lethierry & Severin, Cat. Gen. Hem. 1:227.
 1894 Tessaratoma indicta: Haglund, Öfv. Vet. Akad. Förh. 51(8):406. (Dn, R)
 1901 Tessaratoma indicta: Distant, Ann. Soc. Ent. Belg. 45(1):28. (R)
 1904a Tessaratoma indicta: Schouteden, Mem. Soc. Espaq. Hist. Nat. 1:160. (R)
 1905 Tessaratoma indicta: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 228, 275, figs. 89-91. (K, S, D, I)
 1909 Tessaratoma indicta: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68 (R)
 1909 Tessaratoma indicta: Kirkaldy, Cat. Hem. 1:350. (S)
 1929 Tessaratoma indicta: Schouteden, Rev. Zool. Bot. Afr. 17(1):64. (R)
 1934 Tessaratoma indicta: Mayné & Ghesquiere, Ann. Gembloux 40(1):12. (R, H)

Distribution: Cameroon, Central Africa, Zaire.

Tessaratoma javanica (Thunberg, 1783)

- 1783 Cimex javanicus Thunberg, Nov. Ins. Sp. 2:45.
 1790 Cimex javanicus: Gmelin, Syst. Nat. ed. 13, 1(4):2158. (Dn)
 1796 Acanthia papillosa: Lichtenstein, Cat. :111. (sec. unpublished work of W. R. Dolling)
 1834 Tessaratoma (sic) javanica: Burmeister, Silb. Rev.

- Ent. 2:26, fig. 2. (antenna)
- 1835 *Tessaratomia* (sic) *javana* Burmeister, Handb. Ent. 2:350. (syn. by Amyot & Serville, 1843)
- 1837a *Tessaratomia* (sic) *proxima* Westwood, Cat. Hope 1:27. (syn. by Stal, 1870, disputed)
- 1840 *Tessaratomia* (sic) *papillosa*: Blanchard, Hist. Nat. Ins. 3:142, pl. 6 fig. 2. (misdet. sec. Amyot & Serville, 1843; S, D)
- 1843 *Tessaratomia* (sic) *javanica*: Amyot & Serville, Hist. Nat. Ins. Hem. XXVIII, 165. (S, D)
- 1851 *Tessaratomia papillosa*: Herrich-Schäffer, Wanz. Ins. 9:309. (cf. *T. papillosa*)
- 1851 *Tessaratomia papillosa*: Dallas, List. Hem. 1:340-341. (misdet?)
- 1859 *Tessaratomia proxima*: Dohrn, Cat. Hen. :21. (L)
- 1863 *Tessaratomia angularis* Dohrn, Stett. Ent. Ztg. 24:349-350. (syn. by Vollenhoven, 1868)
- 1868 *Tessaratomia* (sic) *javanica*: Vollenhoven, Faune Ent. Indo-Neerl. 3:25-26, pl. 3 fig. 4b. (D, R; plate legend misspelled *javana*)
- 1868 *Tessaratomia* (sic) *angularis*: Walker, Cat. Het. 3:462. (L)
- 1868 *Tessaratomia* (sic) *javanica*: Walker, Cat. Het. 3:462. (S, R)
- 1868 *Tessaratomia* (sic) *proxima*: Walker, Cat. Het. 3:462. (L)
- 1868 *Tessaratomia* (sic) *striata* Walker, Cat. Het. 3:463. (syn. by Distant, 1902; syn. with *T. papillosa* by Stichel, 1962)
- 1868 *Tessaratomia* (sic) *furcifera* Walker, Cat. Het. 3:463-464. (syn. by Distant, 1902; syn. with *T. papillosa* by Stichel, 1962)
- 1868 *Tessaratomia* (sic) *timorensis* Walker, Cat. Het. 3:464. (preoccupied Vollenhoven, 1868; syn. by Distant, 1902)
- 1868 *Tessaratomia* (sic) *clara* Walker, Cat. Het. 3:464-465. (syn. by Distant, 1902; syn. with *T. papillosa* by Stichel, 1962)
- 1870 *Tessaratomia javanica*: Stal, Sv. Vet. Akad. Handl. 9(1):67. (S, R)
- 1888 *Tessaratomia* (sic) *javanica*: Lethierry, Ann. Mus. Civ. Storia Nat. Genova (2)6(26):461. (R)
- 1889 *Tessaratomia javanica*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):55-56. (S, D, part)
- 1889 *Tessaratomia ?furcifera*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):57. (quotes original D)
- 1892 *Tessaratomia papillosum* var. *clara*: Kirby, Linn. J. Zool. 24:87. (as syn. of *Tessaratomia papillosa*)
- 1893 *Tessaratomia javanica*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
- 1893 *Tessaratomia ?furcifera*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (L)
- 1893 *Tessaratomia striata*: Lethierry & Severin, Cat. Gen. Hem. 1:228. (L)
- 1900 *Tessaratomia papillosa*: Distant, Ann. Mag. Nat. Hist. (7)6:60, 63. (syn. only sec. Distant 1902)
- 1900 *Tessaratomia javanica*: Horváth, Zoolog. Forschungsreisen 5:633. (S, R)
- 1901a *Tessaratomia javanica*: Distant, Trans. Ent. Soc. Lond. 1901(1):103. (R)
- 1902 *Tessaratomia javanica*: Distant, Fauna Brit. India, Rh. 1: 259. (S, D, R)
- 1903a *Tessaratomia javanica*: Distant, Fasc. Malay. Zool. 1(2):236-237. (S, R)
- 1905a *Tessaratomia javanica*: Breddin, Mitt. Nat. Mus. Hamb. 22:115. (R)
- 1909 *Tessaratomia javanica*: Maxwell-Lefroy, Indian Ins. Life: 677, fig. 438. pl. 74 fig. 8. (Dn. I. stridulation)
- 1909 *Tessaratomia javanica*: Kirkaldy, Cat. Hem. 1:350. (S)
- 1917 *Tessaratomia javanica*: Seidlecki, Bull. Acad. Sci. Cracovie 1917(B):232-238, figs. 1, 2a, 2b. (I, cf. *T. papillosa*)
- 1921 *Tessaratomia javanica*: Distant, Entomologist 54:(698)164. (R)
- 1923 *Tessaratomia javanica*: Lehmann, Zool. Anz. 57(7/8):180. (R)
- 1935 *Tessaratomia javanica*: Glover, Ind. Lac. Res. Inst. Ann. Rpt. 1934-1935:15. (H)
- 1935 *Tessaratomia javanica*: Hoffmann, Lingnan Univ. Sci. Bull. 7:130, 177. (S, R)
- 1938 *Tessaratomia javanica*: Sen, Rpt. Ind. Lac. Res. Inst. Namhum:38. (H)
- 1945 *Tessaratomia furcifera*: Blöte, Zool. Meded. 25:292, fig. 3a. (Dn, R)
- 1945 *Tessaratomia javanica*: Blöte, Zool. Meded. 25:293, fig. 3b. (Dn, R)
- 1945 *Tessaratomia proxima*: Blöte, Zool. Meded. 25:292, 295, fig. 3c. (Dn, R)
- 1945 *Tessaratomia striata*: Blöte, Zool. Meded. 25:292, 295, fig. 3d. (Dn, R)
- 1948 *Tessaratomia furcifera*: Hoffmann, Lingnan Sci. J. 22(1-4):29. (S, R)
- 1948 *Tessaratomia javanica*: Hoffmann, Lingnan Sci. J. 22(1-4):29. (S, R)
- 1950 *Tessaratomia javanica*: Kalshoven, Plag. Cult. Indonesie. 1:204, ppl. 4 fig. k. (H, I)
- 1955 *Tessaratomia javanica*: Mehra & Kapur, Indian J. Ent. 17(1):76-88. (B)
- 1957 *Tessaratomia furcifera*: Zia, Acta Ent. Sin. 7:426, 428-429, fig. 3b. (K, S, D, R)
- 1958 *Tessaratomia javanica*: Mehra & Purakayastha, Indian J. Ent. 19(3):214-216. (outbreak)
- 1963 *Tessaratomia javanica*: Bose & Sinha, Indian J. Ent. 25:269, 270. (scent gland Ph)
- 1966 *Tessaratomia javanica*: Mehra, Indian J. Ent. 28(2):241-249. (P)
- 1966 *Tessaratomia javanica*: Bose & Sen, J. Zool. Soc. India 18(1-2):94-103. (salivary apparatus)
- 1968 *Tessaratomia javanica*: Cobben, Evol. Trends Het. Eggs: 112, 114. (E)
- 1973 *Tessaratomia javanica*: Cheema et al., Comm. Inst. Biol. Contr. Tech. Bull. 16:37. (E, P)
- 1978 *Tessaratomia javanica*: Reddy et al., Entomon. 3(1):25-29. (C)
- 1979 *Tessaratomia javanica*: Janaiah et al., Indian J. Exp. Biol. 17: 1233-1235. (sgf)
- 1980 *Tessaratomia javanica*: Devi et al., J. Anim. Morph. Physiol. 27(1-2):290-294. (wing venation)
- 1980 *Tessaratomia javanica*: Chen, Ghizhou Agric. Sci. 1980(3):53, 56. (R, K)
- 1981 *Tessaratomia javanica*: Hinton, Biol. Ins. Eggs 1:594 (E)
- 1981 *Tessaratomia javanica*: Hill, Agric. Ins. Pests. Trop. 591. (H)
- 1982 *Tessaratomia javanica*: Nuamah, InsectSci. Application 3(1):15, 25. (C)
- 1983 *Tessaratomia javanica*: Kalshoven, Pest. Crops Indonesia :94, pl. C fig. k (H)
- 1987 *Tessaratomia javanica*: Schaefer & Ahmad, Phytophaga 1:27. (H)
- Distribution:** Borneo, Burma, China (Yunnan), India (Assam), Indo-China, Java, Laos, Lesser Sunda Is. (Adonara, Bali, Flores I., Lombok I., Timor I.), Malay Peninsula, Philippines, Sri Lanka, Sumatra, Thailand, Vietnam.

Tessaratomya javanica nigripes Dallas, 1851 — see Tessaratomya kina

Tessaratomya (sic) javanica stictica Vollenhoven, 1868 — see Tessaratomya conspersa

Tessaratomya (sic) javanica timorensis Vollenhoven, 1868 — see Tessaratomya timorensis

Tessaratomya kina Distant, 1909.

1868 Tessaratomya (sic) javanica var. nigripes: Vollenhoven, Faune Ent. Indo-Neerl. 3:26. (misdet. sec. Breddin, 1912 & Blöte 1945)

1909 Tessaratomya kina Distant, Rec. Indian Mus. 3(2):164-165, pl. 10 fig. 11, 11a, 11b.

1912 Tessaratomya lauta Breddin, Arch. Naturges. Berlin. 78A(6):81. (syn. by Blöte 1945)

1945 Tessaratomya kina: Blöte, Zool. Meded. 25:294. (S, R)

1971 Tessaratomya lauta: Gaedike, Beitr. Ent. 21(1-2):90. (T)

Distribution: Borneo.

Tessaratomya kinta Distant, 1909.

1909 Tessaratomya kinta Distant, Rec. Indian Mus. 3(2):163-164, pl. 10 fig. 8, 8a, 8b.

Distribution: Malaysia (Perak).

Tessaratomya lauta Breddin, 1912 — Tessaratomya kina

Tessaratomya longicornis Dohrn, 1863

1863 Tessaratomya longicornis Dohrn, Stett. Ent. Ztg. 24:349.

1868 Tessaratomya longicornis: Walker, Cat. Het. 3:462. (L)

1870 Tessaratomya longicornis: Stål, Sv. Vet. Akad. Handl. 9(1):66. (R)

1871 Tessaratomya longicornis: Stål, Öfv. Vet. Akad. Förh. 27(7):642. (R)

1893 Tessaratomya longicornis: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)

1909 Tessaratomya longicornis: Kirkaldy, Cat. Hem. 1:350. (S)

1923 Tessaratomya longicornis: Lehmann, Zool. Anz. 57(7/8):180. (R)

1945 Tessaratomya longicornis: Blöte, Zool. Meded. 25:294. (R)

Distribution: Philippines.

Tessaratomya luctuosa (Stål, 1863) — see Hypencha luctuosa

Tessaratomya malaya Stål, 1870

1870 Tessaratomya malaya Stål, Sv. Vet. Akad. Handl. 9(1):67.

1873 Tessaratomya (sic) malaya: Walker, Cat. Het. Suppl. 26. (L)

1879 Tessaratomya malaya: Distant, Ann. Mag. Nat. Hist. (5)3:45. (misdet. see T. quadrata)

1889 Tessaratomya malaya: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):54-55. (misdet. see Tessaratomya quadrata)

1890 Tessaratomya (sic) malaya: Sharp, Trans. Ent. Soc. Lond. 1890(3):402, pl. 12 fig. 1. (M)

1892 Tessaratomya malaya: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)

1893 Tessaratomya malaya: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)

1909 Tessaratomya malaya: Kirkaldy, Cat. Hem. 1:350. (S)

Distribution: India, Ligor, Moluccas.

Tessaratomya miscella Montandon, 1894

1894 Tessaratomya miscella Montandon, Ann. Soc. Ent. Belg. 38(1893):634-635.

1905 Tessaratomya miscella: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 229-230, figs. 92-93.

1908 Tessaratomya miscella: Bergroth, Mem. Soc. Ent. Belg. 15:169. (L)

1909 Tessaratomya miscella: Kirkaldy, Cat. Hem. 1:250. (S)

Distribution: Congo, Gabon.

Tessaratomya miscella viridans Montandon, 1894

1894 Tessaratomya miscella var. viridans Montandon, Ann. Soc. Ent. Belg. 38(1893):635-636.

1905 Tessaratomya miscella var. viridans: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 230, pl. 5 fig. 4.

1909 Tessaratomya miscella var. viridans: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 68

1909 Tessaratomya miscella var. viridans: Kirkaldy, Cat. Hem. 1:250. (S)

1969 Tessaratomya miscella var. viridans: Synave, Bull. Inst. R. Sci. Nat. Belg. 45(32):14. (T)

Distribution: Congo, Gabon.

Tessaratomya nemorivaga Distant, 1890

1890a Tessaratomya nemorivaga Distant, Proc. Zool. Soc. Lond. 1890(3):476-477.

1892 Tessaratomya nemorivaga: Distant, Ent. Mon. Mag. (2)3(31):189. (Dn)

1893 Tessaratomya nemorivaga: Lethierry & Severin, Cat. Gen. Hem. 1:227. (L)

1905 Tessaratomya nemorivaga: Schouteden, Ann. Mus. Congo Belge Zool. ser. 3, 1(2):222, 224-225, 275, figs. 79-81. (K, S, D, R, I)

1909 Tessaratomya nemorivaga: Schouteden, Ann. Mus. Congo Belge Zool. 3, 1(1): 69 (R)

1909 Tessaratomya nemorivaga: Kirkaldy, Cat. Hem. 1:250. (S)

1921 Tessaratomya (sic) nemorivaga: Lehmann, Arch. Naturges. Berlin Abt. 87A(6):39. (R)

1952a Tessaratomya nemorivaga: Villiers, Init. Afr. 9:83. (Dn, R)

Distribution: Cameroon, Congo, Zaire.

Tessaratomya niamensis Schouteden, 1904 — see Tessaratomya alzeili

Tessaratomya nigripes Dallas, 1851

1851 Tessaratomya nigripes Dallas, List. Hem. 1:341.

1859 Tessaratomya nigripes: Dohrn, Cat. Hem.:21. (L)

1862 Tessaratomya (sic) nigripes: Stål, Öfv. Vet. Akad. Förh. 19(9):497. (as syn. of Hypencha apicales Amyot & Serville)

1868 Tessaratomya (sic) javanica var. nigripes: Vollenhoven, Faune Ent. Indo-Neerl. 3:26. (misdet. see Tessaratomya kina)

1868 Tessaratomya nigripes: Walker, Cat. Het. 3:461. (R)

1870 Tessaratomya nigripes: Stål, Sv. Vet. Akad. Handl. 9(1):67. (L)

1871 Tessaratomya nigripes: Stål, Öfv. Vet. Akad. Förh. 27(7):642. (R)

1889 Tessaratomya nigripes: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):54. (S, D)

1890 Tessaratomya (sic) nigripes: Sharp, Trans. Ent. Soc. Lond. 1890(3):401-402, pl. 12 fig. 2. (M)

1893 Tessaratomya nigripes: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)

1902 Tessaratomya nigripes: Distant, Fauna Brit. India, Rh. 1: 257-258. (S, D, R)

1909 Tessaratomya nigripes: Kirkaldy, Cat. Hem. 1:350. (syn)

- 1910 *Tessaratoma nigripes*: Stebbing, Ind. For. Men. 1:21. (H)
- 1923 *Tessaratoma nigripes*: Lehmann, Zool. Anz. 57(7/8):108. (R)
- 1985 *Tessaratoma nigripes*: Datta et al., Rec. Zool. Surv. India Occ. Pap., no. 80, 1985:24, fig. 58. (Dn, R)
- Distribution:** Borneo, E. Indies, India (Sikkim), Java, Malay Peninsula, Philippines, S.E. Asia, Sumatra.
- Tessaratoma nigroscutellata* Distant, 1921
- 1921 *Tessaratoma nigroscutellata* Distant, Entomol. 54:(698)165.
- 1932b *Tessaratoma nigroscutellata*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
- 1935 *Tessaratoma nigroscutellata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:130. (L)
- 1935 *Tessaratoma nigroscutellata*: Tang, Cat. Ins. Sin. 2:363. (S)
- 1945 *Tessaratoma nigroscutellata*: Blöte, Zool. Meded. 25:294. (R)
- 1948 *Tessaratoma nigroscutellata*: Hoffmann, Lingnan Sci. J. 22(1-4):29. (R)
- Distribution:** Vietnam.
- Tessaratoma oblonga* Blöte, 1945
- 1945 *Tessaratoma oblonga* Blöte, Zool. Meded. 25:294, fig. 3e.
- Distribution:** Borneo.
- Tessaratoma ophthalmica* (Stål, 1863) — see *Hypencha ophthalmica*
- Tessaratoma* (sic) *opposita* Walker, 1868 — see *Hypencha opposita*
- Tessaratoma ossacruenta* Gray, 1832 — see *Tessaratoma papillosa*
- Tessaratoma ostracioptera* Montrouzier, 1845 — see *Oncomeris ostracioptera*
- Tessaratoma papillosa* (Drury, 1770)
- 1770 *Cimex papillosus* Drury, Ill. Nat. Hist. 1:96-97, pl. 43 fig. 2. (species name in index)
- 1783 *Cimex chinensis* Thunberg, Nov. Ins. Sp. 2:45, pl. 2 fig. 59. (syn. by Wolff, 1880)
- 1790 *Cimex sinensis* (sic): Gmelin, Syst. Nat. ed. 13, 1(4):2158. (Dn)
- 1794 *Cimex papillosus*: Fabricius, Ent. Syst. 4:106-107. (misdet. see *Piezosternum calidum*)
- 1800 *Cimex papillosus*: Wolff, Icon. Cim. 1:12, pl. 2 fig. 12. (S, D)
- 1800 *Cimex papillosus*: Donovan, Nat. Hist. Ins. India: 14 (fig.), 21. (Dn, I)
- 1803 *Edessa papillosus*: Fabricius, Syst. Rh. 1:150. (misdet. see *Tessaratoma afzelii*)
- 1825 *Tessaratoma sonnerati* Lepeletier & Serville, Enc. Meth. 10:590-591. (syn. with *Cimex chinensis* Thunberg, 1783, by Mayr, 1866)
- 1831 *Tessaratoma* (sic) *sonnerati*: Guérin-Ménéville, Voy. Coq. Ins. 2(2):1, pl. 65 fig. 4.
- 1831 *Tessaratoma* (sic) *sonnerati*: Guérin-Ménéville, Icon. Regne Animal. vol. 2, pl. 55 fig. 4. [date tentative]
- 1831 *Tessaratoma* (sic) *chinensis*: Guérin-Ménéville, Icon. Regne Animal. Insectes. 345, pl. 55 fig. 4. [date uncertain]
- 1832 *Tessaratoma ossacruenta* Gray, Griffith's Anim. Kingd. 15:239.
- 1833 *Tessaratoma chinensis*: Laporte, Mag. Zool. (Guérin), 2:59-60. (Dn)
- 1834 *Tessaratoma* (sic) *sonnerati*: Burmeister, Nov. Act. Leop. Carol 16 Suppl.:293. (R)
- 1835 *Tessaratoma* (sic) *javana* Burmeister, Handb. Ent. 2:350. (syn. by Dallas, 1851, disputed, see *Tessaratoma javanica*)
- 1835 *Tessaratoma* (sic) *papillosa*: Burmeister, Handb. Ent. 2:350-351. (misdet. see *Tessaratoma afzelii*)
- 1835 *Tessaratoma papillosa*: Hahn, Wanz. Ins. 2:123-124, fig. 204. (S, Dn)
- 1835 *Tessaratoma papillosa*: Brullé, Hist. Nat. Ins. 9:395, pl. 30 fig. 5. (Dn)
- 1837 *Tessaratoma papillosa*: Spinola, Essai: 341. (L)
- 1840 *Tessaratoma* (sic) *papillosa*: Blanchard, Hist. Nat. Ins. 3:142, pl. 6 fig. 2. (misdet. see *Tessaratoma javanica*)
- 1840 *Tessaratoma* (sic) *sonnerati*: Blanchard, Hist. Nat. Ins. 3:142. (S, D)
- 1842 *Tessaratoma papillosa*: Westwood, Donovan's Ins. India 24, pl. 14 fig. 2.
- 1843 *Tessaratoma* (sic) *papillosa*: Amyot & Serville, Hist. Nat. Ins. Hem. 1:165-166. (S, D)
- 1851 *Tessaratoma* (sic) *papillosa*: Herrich-Schäffer, Wanz. Ins. 9:309. (cf. *T. javanica*)
- 1851 *Tessaratoma chinensis*: Dallas, List. Hem. 1:340. (S, R)
- 1851 *Tessaratoma papillosa*: Dallas, List. Hem. 1:340-341. (misdet?)
- 1859 *Tessaratoma chinensis*: Dohrn, Cat. Hem. 21. (S)
- 1859 *Tessaratoma papillosa*: Dohrn, Cat. Hem. 21. (part)
- 1862 *Tessaratoma* (sic) *papillosa*: Ellenrieder, Nat. Tijdschr. Ned. India 24:169-170, pl. 6 figs. 2, 3a, 5.
- 1866 *Tessaratoma* (sic) *chinensis*: Mayr, Reise Novara Zool. 2(1):74. (S, R)
- 1868 *Tessaratoma* (sic) *chinensis*: Vollenhoven, Faune Ent. Indo-Neerl. 3:pl. 3 fig. 4a. (fig. only)
- 1868 *Tessaratoma* (sic) *chinensis*: Walker, Cat. Het. 3:461. (R)
- 1868 *Tessaratoma* (sic) *papillosa*: Walker, Cat. Het. 3:461. (R)
- 1870 *Tessaratoma papillosa*: Stål, Sv. Vet. Akad. Handl. 9(1):67-68. (S, R)
- 1889 *Tessaratoma papillosa*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):56-57. (S, D: part see also *Tessaratoma javanica*)
- 1890 *Tessaratoma* (sic) *papillosa*: Sharp, Trans. Ent. Soc. Lond. 1890(3):402, pl. 12 fig. 3. (M)
- 1892 *Tessaratoma* (sic) *papillosa*: Kirby, Linn. J. Zool. 24:87. (misdet. of *Tessaratoma javanica*?)
- 1893 *Tessaratoma papillosa*: Lethierry & Severin, Cat. Gen. Hem. 1:227. (S)
- 1900 *Tessaratoma papillosa*: Distant, Ann. Mag. Nat. Hist. (7)6:60, 63. (see *Tessaratoma javanica*)
- 1901c *Tessaratoma papillosa*: Distant, Proc. Zool. Soc. Lond. 1900(4):817, 823. (syn. *Tessaratoma proxima* Westwood, 1837, disputing Stål, 1870; see *Tessaratoma javanica*)
- 1901 *Tessaratoma* (sic) *papillosa*: Kirkaldy, Entomol. 34(453):52. (R, behavior)
- 1902 *Tessaratoma papillosa*: Distant, Fauna Brit. India, Rh. 1: 259-260. (S, Dn, R)
- 1907 *Tessaratoma papillosa*: Kershaw, Trans. Ent. Soc. Lond. 1907:253-255, pl. 23. (B)
- 1907 *Tessaratoma papillosa*: Muir, Trans. Ent. Soc. Lond. 1907: 256-258. (M)
- 1909 *Tessaratoma papillosa*: Maxwell-Lefroy, Indian Ins. Life: 678, fig. 441. (I, fig. only)
- 1909 *Tessaratoma papillosa*: Kirkaldy, Cat. Hem. 1:350-

351. (S)
- 1910 *Tessaratoma papillosa*: Kirkaldy, Ann. Soc. Ent. Belg. 54(4):111. (R)
- 1911 *Tessaratoma papillosa*: Bugnion & Popoff, Archs. Zool. Exp. Gen. (5)7(2):649, 651, 653, 654, 656, 668, figs. 15-18. (M)
- 1917 *Tessaratoma papillosa*: Siedlecki, Bull. Acad. Sci. Cracovie 1917(B):232-238, figs. 3, 4a, 4b. (I, cf. *T. javanica*)
- 1919 *Tessaratoma chinensis*: Hart, Ill. Nat. Hist. Surv. Bull. 13:pl. 16 fig.2. (fig. only)
- 1925 *Tessaratoma papillosa*: Falkenstein, Lingnan Agric. Rev. 3(1):64-65. (B, H, R)
- 1929 *Tessaratoma papillosa*: Hoffmann, Proc. 3rd. Pan-Pac. Sci. Congr. Tokyo 2:2034. (squirts scent fluid)
- 1930 *Tessaratoma papillosa*: Weber, Biol. Hem. :75, 256. (stridulation, sgf)
- 1931 *Tessaratoma papillosa*: Falkenstein, Lingnan Sci. J. 10:29-82. pls. 11, 12. (B, E, I, P, R)
- 1931 *Tessaratoma papillosa*: Shang [Chang], Lingnan Sci. J. 10(4):399-411. (D)
- 1931 *Tessaratoma papillosa*: Hoffmann, Ins. Pst. Sur. Bull. 11(3):144. (L)
- 1932 *Tessaratoma papillosa*: Hoffmann, Arch. Zool. Ital. 16(3-4):1026-1027. (H, B)
- 1932 *Tessaratoma papillosa*: Wu, Mar. Biol. Assoc. China, 1st. Ann. Rep. :82. (R)
- 1932a *Tessaratoma papillosa*: Hoffmann, Lingnan Sci. J. 11(1):141. (R)
- 1932b *Tessaratoma papillosa*: Hoffmann, J. Pan-Pac. Res. Inst. 7(1):10. (L)
- 1933 *Tessaratoma papillosa*: Schouteden, Mem. Mus. Hist. Nat. Belg. 4(8):51. (R)
- 1933 *Tessaratoma papillosa*: Wu, Lingnan Sci. J. 12 Suppl.:224. (R)
- 1934 *Tessaratoma papillosa*: Yang, Bull. Fan Mem. Inst. Biol. 5(2):52-54, fig. 3. (K, D)
- 1935 *Tessaratoma papillosa*: Hoffmann, Lingnan Univ. Sci. Bull. 7:130-131, 177. (S, R)
- 1935 *Tessaratoma papillosa*: Yang, Bull. Fan Mem. Inst. Biol. 6(3):128-129, pl. 5 figs. 78, 79. (S, D, K)
- 1935 *Tessaratoma papillosa*: Tang, Cat. Ins. Sin. 2:363-364. (S, R)
- 1935 *Tessaratoma papillosa*: Cheo, Bull. Nat. Hist. Peking 10(1):31. (H, R)
- 1945 *Tessaratoma papillosa*: Blöte, Zool. Meded. 25:294-295. (R)
- 1948 *Tessaratoma papillosa*: Hoffmann, Lingnan Sci. J. 22(1-4):30-31. (S, R, H)
- 1951 *Tessaratoma papillosa*: Poisson, Traité Zool. 10(2):1793. (sgf)
- 1953 *Tessaratoma papillosa*: Dupuis, Cah. Nat. (Bull. Nat. Paris) (n.s.) 8(3-4):25. (stridulation)
- 1956 *Tessaratomia* (sic) *papillosa*: Stichel, Verz. Pal. Hem. Het. 4:204. (S)
- 1957 *Tessaratoma papillosa*: Zia, Acta Ent. Sin. 7:426, 427-428, fig. 3a, 6-8. (K, S, D, R)
- 1962 *Tessaratoma papillosa*: Yang, Econ. Ins. Fauna China 2:40-41, pl. 4 fig.28.
- 1962 *Tessaratoma papillosa*: Hasegawa, Nature Life S.E. Asia 2:7, pl. 1 fig. 7. (S, R)
- 1964 *Tessaratomia* (sic) *papillosa*: Sienkiewicz, Cat. Montandon Coll.: 112. (R)
- 1974 *Tessaratomia papillosa*: Chang, Acta Ent. Sin. 17(3):356.
- 1977 *Tessaratomia papillosa*: Hsiao et al., Handb. Chinese Hem.-Het. 1:66, figs. 297, 312, pl. 7 fig. 109. (K)
- 1979 *Tessaratomia papillosa*: Staddon, Adv. Ins. Physiol. 14:368. (scent gland)
- 1980 *Tessaratomia papillosa*: Chen, Ghizhou Agric. Sci. 1980(3):53, 56. (R, K)
- 1983a *Tessaratomia papillosa*: Hill, Agric. Ins. Pests Trop.:268-269, figs. (H, B, D)
- 1985 *Tessaratomia papillosa*: Zhang, Econ. Ins. China 31:48-49, fig. 112, pl. 1, fig. 2.1-2.6. (D: plate figure mislabeled *T. quadrata*)
- 1987 *Tessaratomia papillosa*: Schaefer & Ahmad, Phytophaga 1:27. (H)
- 1988 *Tessaratomia papillosa*: Chen & Yang, J. Guizhou Agric. Coll. no. 1:90. (R)
- 1989 *Tessaratomia papillosa*: Hua, List Ins. Zhongshan Univ. :45. (L)
- 1990 *Tessaratomia papillosa*: Ren et al., Act. Ent. Sin. 33(2):191, pl. 3 fig. E. (egg-burster)
- 1991 *Tessaratomia papillosa*: Easton, Ent. News 102(2):107. (R, H)
- Distribution:** Australia, Borneo, Burma, China (Fujian, Guangdong, Guangxi, Guizhou, Hainan I., Jiangxi, Kiangsi, Kweichow, Kwangtung, Manchuria, Sichuan, Yunnan), E. Indies, India (Assam), Indo-China, Indonesia, Japan, Java, Laos, Lesser Sunda Is. (Lombok I, Timor I.), Malaysia, Philippines, Sierra Leone, S.E. Asia, Sri Lanka, Sumatra, Thailand, Vietnam.
- Note: Stichel (1962) lists *Tessaratomia striata* Walker, 1868; *T. furcifer* Walker, 1868; and *T. clara* Walker, 1868, in the synonymy of *T. papillosa* without explanation, thus disputing Distant (1902) who synonymized these names under *T. javanica*.
- Tessaratomia papillosum clara* Walker, 1868 — see *Tessaratomia javanica*
- Tessaratomia picea* Dallas, 1851 — see *Hypencha apicalis*
- Tessaratomia planicarinata* Breddin, 1912
- 1912 *Tessaratomia planicarinata* Breddin, Arch. Naturges. Berlin. 78A(6):79-80.
- 1945 *Tessaratomia planicarinata*: Blöte, Zool. Meded. 25:295. (R)
- 1971 *Tessaratomia planicarinata*: Gaedike, Beitr. Ent. 21(1-2):96. (T)
- Distribution:** Lesser Sundas. (Ardonara, Flores I. Sumbawa I., Timor I., Wetar I.).
- Tessaratomia* (sic) *proxima* Westwood, 1837 — see *Tessaratomia javanica*
- Tessaratomia quadrata* Distant, 1902
- 1879 *Tessaratomia malaya* Distant, Anni. Mag. Nat. Hist. (5)3:45. (R, misdet. sec. Distant, 1902)
- 1889 *Tessaratomia malaya*: Atkinson, J. Asiatic Soc. Bengal 58(pt.2):54-55. (misdet. sec. Distant, 1902; D)
- 1902 *Tessaratomia quadrata* Distant, Fauna Brit. India, Rh. 1: 258-259, fig. 164. (S)
- 1908 *Tessaratomia quadrata*: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
- 1909 *Tessaratomia quadrata*: Kirkaldy, Cat. Hem. 1:351. (S)
- 1921 *Tessaratomia quadrata*: Distant, Entomol. 54:(698)164. (R)
- 1935 *Tessaratomia quadrata*: Hoffmann, Lingnan Univ. Sci. Bull. 7:131. (S, R)
- 1945 *Tessaratomia quadrata*: Blöte, Zool. Meded. 25:295. (R)
- 1948 *Tessaratomia quadrata*: Hoffmann, Lingnan Sci. J. 22(1-4):31. (S, R)

- 1957 Tessaratoma quadrata: Zia, Acta Ent. Sin. 7:426, 427, figs. 3C, 4, 5. (K, D, R)
 1962 Tessaratoma quadrata: Yang, Econ. Ins. Fauna China 2:40, 41-42.
 1977 Tessaratoma quadrata: Hsiao et al., Handb. Chinese Hem.-Het. 1:65, figs. 296, 315, pl. 7 fig.108. (K)
 1980 Tessaratoma quadrata: Chen, Ghizhou Agric. Sci. 1980(3):53, 56. (R, K)
 1985 Tessaratoma quadrata: Zhang, Econ. Ins. China 31:48, pl. 46 fig. 154. (D; fig. 113 not this species; fig. 154 on pl. 46 mislabeled T. quadrata)
 1988 Tessaratoma quadrata: Chen & Yang, J. Guizhou Agric. Coll. no. 1:90. (R)
 1989 Tessaratoma quadrata: Hua, List Ins. Zhongshan Univ. :45.

Distribution: China (Guangxi, Ghizhou, Guangdong, Sichuan, Yunnan), India (Assam, Sikkim), Indo-China, Nepal, Vietnam.

Tessaratoma reriki (Ellenreider, 1862) — see Hypencha apicalis

Tessaratoma robustus Lepeletier & Serville, 1828 — see Eusthenes robustus

Tessaratoma rubida Breddin, 1901

- 1901 Tessaratoma rubida Breddin, Abh. Naturf. Ges. Halle 24:14, 61-62.
 1908 Tessaratoma rubida: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 Tessaratoma rubida: Kirkaldy, Cat. Hem. 1:351. (L)
 1945 Tessaratoma conspersa var. rubida: Blöte, Zool. Meded. 25:292. (R)
 1971 Tessaratoma rubida: Gaedike, Beitr. Ent. 21(1-2):98. (T)

Distribution: Sulawesi (Celebes).

Tessaratoma scutellaris Herrich-Schäffer, 1838 — see Eusthenes scutellaris

Tessaratoma (sic) semicuprea Walker, 1868 — see Hypencha apicalis

Tessaratoma sonneratii Lepelletier & Serville, 1828 — see Tessaratoma papillosa

Tessaratoma spinipes Bergroth, 1906

- 1906 Tessaratoma spinipes Bergroth, Ann. Soc. Ent. Belg. 50:196-197.
 1908 Tessaratoma spinipes: Bergroth, Mem. Soc. Ent. Belg. 15:186. (L)
 1909 Tessaratoma spinipes: Kirkaldy, Cat. Hem. 1:351. (L)
 Distribution: E. Africa, Tanzania (Pemba I.).

Tessaratoma slictica Vollenhoven, 1868 — see Tessaratoma conspersa

Tessaratoma striata Walker, 1868 — see Tessaratoma javanica

Tessaratoma (sic) taurus Westwood, 1837 — see Embolosterna taurus

Tessaratoma timorensis Vollenhoven, 1868

- 1868 Tessaratoma (sic) javanica var. timorensis Vollenhoven, Faune Ent. Indo-Neerl. 3:26, pl. 3 fig. 5.
 1893 Tessaratoma timorensis: Lethierry & Severin, Cat. Gen. Hem. 1:228. (part)
 1907a Tessaratoma timorensis: Schouteden, Notes Leyden Mus. 30:44. (Ts)

- 1945 Tessaratoma timorensis: Blöte, Zool. Meded. 25:295. (as Nn for Tessaratoma javanica var. timorensis Vollenhoven, 1868)

Distribution: Lesser Sunda Is. (Adonara, Timor).

Tessaratoma timorensis Walker, 1868 — Tessaratoma javanica

Tessaratoma usambarica Breddin, 1903 — Tessaratoma afzelii

Tessaratomia [misspelling] — see Tessaratoma

INCERTAE SEDIS

NOTOPOMINI

Horváth, 1900b.

Type genus: Notopomus Montandon, 1894a

1900a Notopomaria Horváth, Term. Füzet. 23:340. (K)

1937 Notopomini: Beier, Handb. Zool. 4(2) Ins. 2:2186. (P)

1955 Notopomini: Leston, Proc. Ent. Soc. Lond. (B) 24(3-4):62. (L)

Notopomus Montandon, 1894

Type species: Notopomus isidorei Montandon, 1894, by monotypy.

1894 Notopomus Montandon, Ann. Soc. Ent. Belg. 38(1893):641-642.

1908 Notopomus: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)

1909 Notopomus: Kirkaldy, Cat. Hem. 1:358. (L)

1969 Notopomus: Kumar, Ann. Ent. Soc. Am. 62(4):693-694. (Ge)

Notopomus isidorei Montandon, 1894

1894 Notopomus isidorei Montandon, Ann. Soc. Ent. Belg. 38(1893):642-643.

1908 Notopomus isidorei: Bergroth, Mem. Soc. Ent. Belg. 15:187. (L)

1909 Notopomus isidorei: Kirkaldy, Cat. Hem. 1:358. (L)

Distribution: Malay Peninsula (Pinang I.)

FOSSIL

Tessaratomoides maximus Jordan, 1967

1967 Tessaratomoides maximus Jordan, Ber. Naturh. Ges. 111:83, pl. 2 fig. 9.

Distribution: Eocene, Germany.

Note: Tessaratomoides does not meet the criteria for availability, having been published without a description, diagnosis or indication.

SYNONYMS IN GENERA OUTSIDE TESSARATOMIDAE

Acanthia papillosa (Drury, 1770) — see Tessaratoma javanica [TESSARATOMARIA]

Aelia amethystina (Fabricius, 1803) — see Pycanum rubens [EUSTHENARIA]

Cimex amethystinus Weber, 1801 — see Pycanum rubens [EUSTHENARIA]

Cimex calidus Fabricius, 1787 — see Piezosternum calidum [ONCOMERINAE]

Cimex chinensis Thunberg, 1783 — see Tessaratomya papillosa [TESSARATOMARIA]

Cimex gazella Fabricius, 1794 — see Piezosternum subulatum [ONCOMERINAE]

Cimex javanicus Thunberg, 1783 — see Tessaratomya javanica [TESSARATOMARIA]

Cimex merianae Fabricius, 1775 — see Plisthenes merianae [ONCOMERINAE]

Cimex meriani Fabricius, 1775 — see Plisthenes merianae [ONCOMERINAE]

Cimex papillosus Drury, 1770 — see Tessaratomya papillosa [TESSARATOMARIA]

Cimex rubens Fabricius, 1794 — see Pycanum rubens [EUSTHENARIA]

Cimex subulatus Thunberg, 1783 — see Piezosternum subulatum [ONCOMERINAE]

Cimex vacca Fabricius, 1794 — see Piezosternum subulatum [ONCOMERINAE]

Dinidor subgenus Eustenes Laporte, 1833 — see Eustenes [EUSTHENARIA]

Dinidor (Eustenes) robustus Lepeletier & Serville, 1828 — see Eustenes robustus [EUSTHENARIA]

Edessa amethystinus (Weber, 1801) — see Pycanum rubens [EUSTHENARIA]

Edessa merianae (Fabricius, 1775) — see Plisthenes merianae [ONCOMERINAE]

Edessa papillosa (Drury, 1770) — see Tessaratomya alzeii [TESSARATOMARIA]

Edessa rubens (Fabricius, 1794) — see Pycanum rubens [EUSTHENARIA]

Edessa vacca (Fabricius, 1794) — see Piezosternum subulatum [ONCOMERINAE]

Edessa vicina Westwood, 1837 — see Piezosternum calidum [ONCOMERINAE]

Lygaeus merianae (Fabricius, 1775) — see Plisthenes merianae [ONCOMERINAE]

Pentatoma platygaster Westwood, 1837 — see Candace platygaster [EUSTHENARIA]

Pentatoma tenebria Palisot de Beauvois, 1806 — see Piezosternum calidum [ONCOMERINAE]

Pentatoma vacca (Fabricius, 1794) — see Piezosternum subulatum [ONCOMERINAE]

Rhaphigaster longitudinalis Westwood, 1837 — see Erga longitudinalis [ONCOMERINAE]

TAXA REMOVED FROM TESSARATOMIDAE

Delocephalus Distant, 1881 [transferred to PENTATOMIDAE by Schouteden, 1909, concurrence by Kumar, 1969b]

Eumenotes Westwood, 1844 [transferred to DINODORIDAE by Leston, 1955, concurrence by Durai, 1987]

Muscanda Walker, 1868 [transferred to PENTATOMIDAE by Kumar & Ghauri 1970]

Vitruvius Distant, 1901 [transferred to PENTATOMIDAE by Kumar & Ghauri 1970]

Xiengia Distant, 1921 [transferred to PENTATOMIDAE by Kumar & Ghauri 1970]

Piezosternum vividum (Stål, 1870) [erroneously transferred from Pantochlora Stål by Walker, 1873]

Tessaratomya obscura Lepeletier & Serville, 1828 [transferred to DINODORIDAE: Cyclopelta obscura by Dallas, 1851]

ABBREVIATIONS AND TITLES FOR SERIALS IN REFERENCES

Abh. Naturf. Ges. Halle= Abhandlungen der Naturforschenden Gesellschaft zu Halle.

Abh. Senckenb. Naturf. Ges.= Abhandlungen hrsg. von Senckenbergischen der Naturforschenden Gesellschaft, Frankfurt a. M.

Acta Ent. Bohemoslovaca = Acta Entomologica Bohemoslovaca, Prague.

Acta Ent. Sin.= Acta Entomologica Sinica, Beijing. (Peiping)

Acta Zool. Fenn.= Acta Zoologica Fennica, Helsinki.

Acta Zool. Lill.= Acta Zoologica Lilloana, Tucuman.

Adv. Ins. Physiol.= Advances in Insect Physiology, London.

Agric. Gaz. N.S.W.= Agricultural Gazette of New South Wales, Sydney.

Agric. Ins. Xizang= Agricultural Insects, Spiders, Plant Diseases and Weeds of Xizang

Am. Mus. Novit.= American Museum Novitates, New York.

Ann. Ent. Soc. Am.= Annals of the Entomological Society of America, Washington.

Ann. Gembloux = Annales de l'Institut Agronomique et des Stations de Recherches de Gembloux.

Ann. Mag. Nat. Hist.= Annals and Magazine of Natural History, London.

Ann. Mus. Civ. Storia Nat. Genova= Annali del Museo Civico di Storia Naturale di Genova.

Ann. Mus. Congo Belge Zool.= Annales du Musée Royal du Congo Belge, Zoologie, Bruxelles, Tervuren.

Ann. Mus. Natn. Hung.= Annales Historico-Naturales Musei Nationalis Hungarici, Budapest.

Ann. Mus. Zool. St. Petersburg = Annuaire du Musée Zoologique de l'Académie Impériale des Sciences, St. Petersburg

Ann. Queensl. Mus.= Annals of the Queensland Museum, Brisbane.

Ann. Soc. Agric. Lyon= Annales de la Société d'Agriculture, Sciences et Industries de Lyon.

Ann. Soc. Ent. Belg.= Annales de la Société Entomologique de Belgique, Bruxelles.

Ann. Soc. Ent. Fr.= Annales de la Société Entomologique de France, Paris.

Ann. S. Afr. Mus.= Annals of the South African Museum,

- Cape Town.
 Ann. Transv. Mus. = Annals of the Transvaal Museum, Pretoria.
 Arch. Naturges. Berlin. = Archiv für Naturgeschichte, Berlin.
 Arch. Zool. Ital. = Archivio Zoologico Italiano, Napoli, later Torino.
 Archs. Zool. Exp. Gen. = Archives de Zoologie Expérimentale et Générale, Paris
 Ark. Zool. = Arkiv för Zoologie, Stockholm.
 Aust. J. Chem. = Australian Journal of Chemistry.
 Aust. J. Zool. = Australian Journal of Zoology, Melbourne.
 Beih. Jb. Hamb. Wiss. Anst. = Beiheft zum Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten, Hamburg. (until 1917, Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten)
 Ber. Naturh. Ges. = Bericht der Naturhistorischen Gesellschaft zu Hannover.
 Berl. Ent. Z. = Berliner Entomologische Zeitschrift, Berlin.
 Biol. Cent. Am. Rh. = Biologia Centrali-Americana, Rhynchota Heteroptera. Godman, F. D. and O. Salvin (eds.).
 Bol. Soc. Port. Cienc. Nat. = Boletim da Sociedade Portuguesa de Ciências Naturais, Lisbon.
 Boll. Soc. Ent. Ital. = Bolletino della Società Entomologica Italiana, Genova.
 Bull. Acad. Sci. Cracovie = Bulletin International de l'Académie des Sciences et des lettres de Cracovie, Kraków.
 Bull. Am. Mus. Nat. Hist. = Bulletin of the Museum of Natural History, New York.
 Bull. Brit. Mus. (N.H.) Ent. Ser. = Bulletin of the British Museum of Natural History, Entomology Series, London.
 Bull. Div. Ent. Pl. Path. Qd = Queensland Department of Agriculture and Stock, Division of Entomology and Plant Pathology.
 Bull. Fan. Mem. Inst. Biol. = Bulletin of the Fan Memorial Institute of Biology, Beijing. (Peiping).
 Bull. I.F.A.N. = Bulletin de l'Institut Français d'Afrique Noire, Dakar.
 Bull. Inst. R. Sci. Nat. Belg. = Bulletin de l'Institut Royal d'Histoire Naturelles de Belgique, Bruxelles.
 Bull. Mus. Paris = Bulletin du Museum National d'Histoire Naturelle, Paris.
 Bull. Soc. Zool. Fr. = Bulletin de la Société Zoologique de France, Paris.
 Cah. Nat. (Bull. Nat. Paris) = Cahiers des Naturalistes (Bulletin des Naturalistes Parisiens), Paris.
 Can. Ent. = Canadian Entomologist, Ottawa.
 Comm. Inst. Biol. Contr. Tech. Bull. = Commonwealth Institute of Biological Control Technical Bulletin, Trinidad, W I
 Contr. Shanghai Inst. Ent. = Contributions of the Shanghai Institute of Entomology.
 Denkschr. Med. Naturw. Ges. Jena = Denkschriften der Medizinisch Naturwissenschaftlichen Gessellschaft zu Jena.
 Dept. Agric. S.S. & F.M.S. Sci. Ser. = Department of Agriculture Straits Settlements and Federated Malayan States Science Series.
 Dt. Ent. Z. = Deutsche Entomologische Zeitschrift, Berlin.
 Ent. Am. = Entomologica Americana, New York.
 Ent. Arb. Mus. Gg. Frey = Entomologische Arbeiten aus dem Museum Georg Frey, München.
 Ent. Exp. & Appl. = Entomologia Experimentalis et Applicata, Amsterdam.
 Ent. Medd. = Entomologiske Meddelelser, Copenhagen.
 Ent. Mo. Mag. = Entomologists Monthly Magazine, London.
 Ent. Nachr. Berlin = Entomologisches Nachrichten, Berlin.
 Ent. News = Entomological News, Philadelphia.
 Ent. Soc. Karachi = Entomological Society of Karachi,
 Pakistan.
 Ent. Tidskr. = Entomologisk Tidskrift, Stockholm.
 Entomol. = Entomologist, London.
 Entomon. = Entomon Kariavattom, India.
 EOS = EOS, Revista Española de Entomología, Madrid.
 Fragm. Ent. = Fragmenta Entomologica, Rome.
 Guizhou Agric. Sci. = Guizhou Agricultural Science, Guizhou.
 Iheringia (Zool.) = Iheringia, Museu Rio-Grandense de Ciências Naturais, Pôrto Alegre. Serie Zoologica.
 Ill. Nat. Hist. Surv. Bull. = Bulletin of the Illinois State Laboratory of Natural History, Bloomfield.
 Indian J. Ent. = Indian Journal of Entomology, New Delhi.
 Indian J. Exp. Biol. = Indian Journal of Experimental Biology, New Delhi.
 Init. Afr. = Initiations Africaines, Dakar.
 Insect Sci. Application = Insect Science and Its Application, London.
 J. Agric. Univ. P. R. = The Journal of Agriculture of the University of Puerto Rico. The Agriculture Experiment Station, Rio Peidras.
 J. Anim. Morph. Physiol. = The Journal of Animal Morphology and Physiology, Bombay.
 J. Asiat. Soc. Beng. = Journal of the Asiatic Society of Bengal, Calcutta.
 J. Dept. Agric. P. R. = The Journal of Agriculture of the Department of Agriculture of Porto Rico. Insular Experiment Station, Rio Peidras.
 J.F.M.S. Mus. = Journal of the Federated Malay States Museums, Kuala Lumpur.
 J. Guizhou Agric. Coll. = Journal of Guizhou Agricultural College.
 J. Ins. Physiol. = Journal of Insect Physiology, London.
 J. Nat. Hist. = Journal of Natural History, London.
 J. Pan-Pac. Res. Inst. = Journal of the Pan-Pacific Research Institute.
 J. Sci. Math. Phys. Nat. = Jornal de Ciencias Mathematics, Physicas e Naturaes, Lisbon.
 J. Soc. Biblphy. Nat. Hist. = Journal of the Society for the Bibliography of Natural History, London.
 J. Straits Soc. = Journal of the Straits Branch of the Royal Asiatic Society, Singapore.
 J. Zool. Soc. India = Journal of the Zoological Society of India, Calcutta.
 Jb. Hamb. Wiss. Anst. = Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten, Hamburg.
 Le Nat. = Le Naturaliste, Paris.
 Lingnan Agric. Rev. = Lingnan Agricultural Review, Canton. (Continued with volume 5 as Lingnan Science Journal).
 Lingnan Sci. J. = Lingnan Science Journal, Canton.
 Lingnan Univ. Sci. Bull. = Lingnan University Science Bulletin, Canton.
 Mar. Biol. Assoc. China = Marine Biology Association of China
 Mem. I.F.A.N. = Mémoires de l'Institut Français d'Afrique Noire, Dakar.
 Mem. Inst. Scient. Madagascar = Mémoires de l'Institut Scientifique de Madagascar, Tananarive.
 Mem. Mus. Hist. Nat. Belg. = Mémoires du Musée Royal d'Histoire Naturelle de Belgique, Bruxelles.
 Mem. Soc. Cubana Hist. Nat. = Memorias de la Sociedad Cubana de Historia Natural, Havana, Cuba.
 Mem. Soc. Ent. Belg. = Mémoires de la Société Entomologique de Belgique, Bruxelles.
 Mem. Soc. Españ. Hist. Nat. = Memorias de la Real Sociedad Español de Historia Natural, Madrid.
 Mem. Soc. Ital. Modena = Memorie di Matematica e di Fisica della Società italiana delle Scienze residente in Modena.

- Mem. Soc. Sci. Nat. Maroc.= Mémoires de la Société de Sciences Naturelles du Maroc, Paris.
- Mitt. Nat. Mus. Hamb.= Mitteilungen aus dem Naturhistorischen Museum in Hamburg (Published in Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten).
- Monit. Zool. Ital. Suppl.= Monitore Zoologico Italiano, supplement (Atti della Società Italiana di Anatomia), Firenze.
- Nature Life S.E. Asia = Nature and Life in Southeast Asia, Kyoto, Japan.
- Nat. Tijd. Ned. Ind.= Natuurkundig Tijdschrift voor Nederlandsch-Indië, Batavia.
- Notes Leyden Mus.= Notes from the Leyden Museum, Leyden.
- Notul. Ent. = Notulae Entomologicae, Helsinki.
- Öfv. Finska Vet. Soc. Förh.= Översigt af Finska Vetenskaps-Societetens Förhandlingar, Helsinki.
- Öfv. Vet. Akad. Förh.= Översigt af Kongliga Svenska Vetenskaps-Akademiens Förhandlingar, Stockholm.
- Ohio Nat.= Ohio Naturalist, Columbus.
- Philipp. J. Sci.= Philippine Journal of Science, Manila.
- Proc. Ent. Soc. Lond.= Proceedings of the Entomological Society of London (continued after 1933 as Proceedings of the Royal Entomological Society of London).
- Proc. Pakistan Congr. Zool.= Proceedings of the Pakistan Congress of Zoology.
- Proc. R. Soc. Queensl.= Proceedings of the Royal Society of Queensland, Brisbane.
- Proc. R. Soc. Vict.= Proceedings of the Royal Society of Victoria, Melbourne.
- Publ. Cult. Comp. Diam. Angola= Publicações Culturais da Companhia de Diamantes de Angola, Lisbon.
- Proc. Zool. Soc. Lond.= Proceedings of the Zoological Society of London.
- Quaes. Ent.= Quaestiones Entomologicae, Edmonton, Alberta.
- Queensl. Agric. J.= Queensland Agricultural Journal, Brisbane.
- Rec. Indian Mus.= Record of the Indian Museum, Calcutta.
- Rec. Zool. Surv. India Occ. Pap.= Record of the Zoological Survey of India, Occasional Papers, Delhi.
- Rev. Ent. = Revue d'Entomologie, Caen.
- Rev. Soc. Ent. Argent.= Revista de la Sociedad Entomologica Argentina, Buenos Aires.
- Rev. Zool. Afr.= Revue de Zoologie Africaine, Bruxelles.
- Rev. Zool. Bot. Afr.= Revue de Zoologie et Botanique Africaines, Bruxelles.
- Sarawak Mus. J.= Sarawak Museum Journal, Sarawak.
- Silb. Rev. Ent.= Revue Entomologique (Silbermann).
- Smithson. Contr. Zool.= Smithsonian Contributions to Zoology, Washington, D.C.
- Soc. Ent.= Societas Entomologica, Stuttgart.
- Spec. Bull. Lep. Soc. Jap.= Special Bulletin of the Lepidopterological Society of Japan, Osaka.
- Stett. Ent. Ztg.= Stettiner Entomologische Zeitung, Stettin.
- Sv. Vet. Akad. Handl.= Kongliga Svenska Vetenskaps-Akademiens Handlingar, Stockholm.
- Term. Füzet.= Termeszetrázi Füzetek, Budapest.
- Tijdschr. Ent.= Tijdschrift voor Entomologie, Amsterdam.
- Trans. Am. Ent. Soc.= Transactions of the American Entomological Society, Philadelphia.
- Trans. Ent. Soc. Lond.= Transactions of the Entomological Society of London (continued after 1933 as Transactions of the Royal Entomological Society of London).
- Trans. Linn. Soc. Lond.= Transactions of the Linnean Society

of London.

Trans. Zool. Soc. Lond.= Transactions of the Zoological Society of London.

USDA Ins. Pest Surv. Bull.= U.S.D.A. Bureau of Entomology, Insect Pest Survey Bulletin.

Wien. Ent. Ztg.= Wiener Entomologische Zeitung, Vienna.

Zool. Jahrb.= Zoologische Jahrbücher, Jena.

Zool. Meded.= Zoologische Mededeelingen, Leiden.

Zool. Res.= Zoological Research, Kunming, China.

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ERRATUM

The last two lines of the abstract of the paper by L.S. Kuniata and G. R. Young (vol 36. NO. 1, p.70) should read as follows;

The LC50 and LC95 for chlorpyrifos were 0.03 % a.i. and 1.40 % a.i., respectively, against weevil borer larvae, and 0.03 % a.i. and 4.60 % a.i against all weevil borer stages.

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t	- tonne
l	- litre
ml	- millilitre
ha	- hectare
mm	- millimetre
cm	- centimetre
m	- metre
a.s.l.	- above sea level
yr	- year
wk	- week
h	- hour
min	- minute
s	- second
K	- kina

n.a.	- not applicable or not available
n.r.	- not recorded
var	- variance
s.d.	- standard deviation
s.e.m.	- standard error of mean
s.e.d.	- standard error of difference
d.f.	- degrees of freedom

Levels of significance

n.s.	not significant
*	- 0.01 $\leq p < 0.05$
**	- 0.001 $\leq p < 0.01$
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