

RMB  
01244

TECHNICAL REPORT 82/2

BIBLIOGRAPHY OF PUBLICATIONS

BY

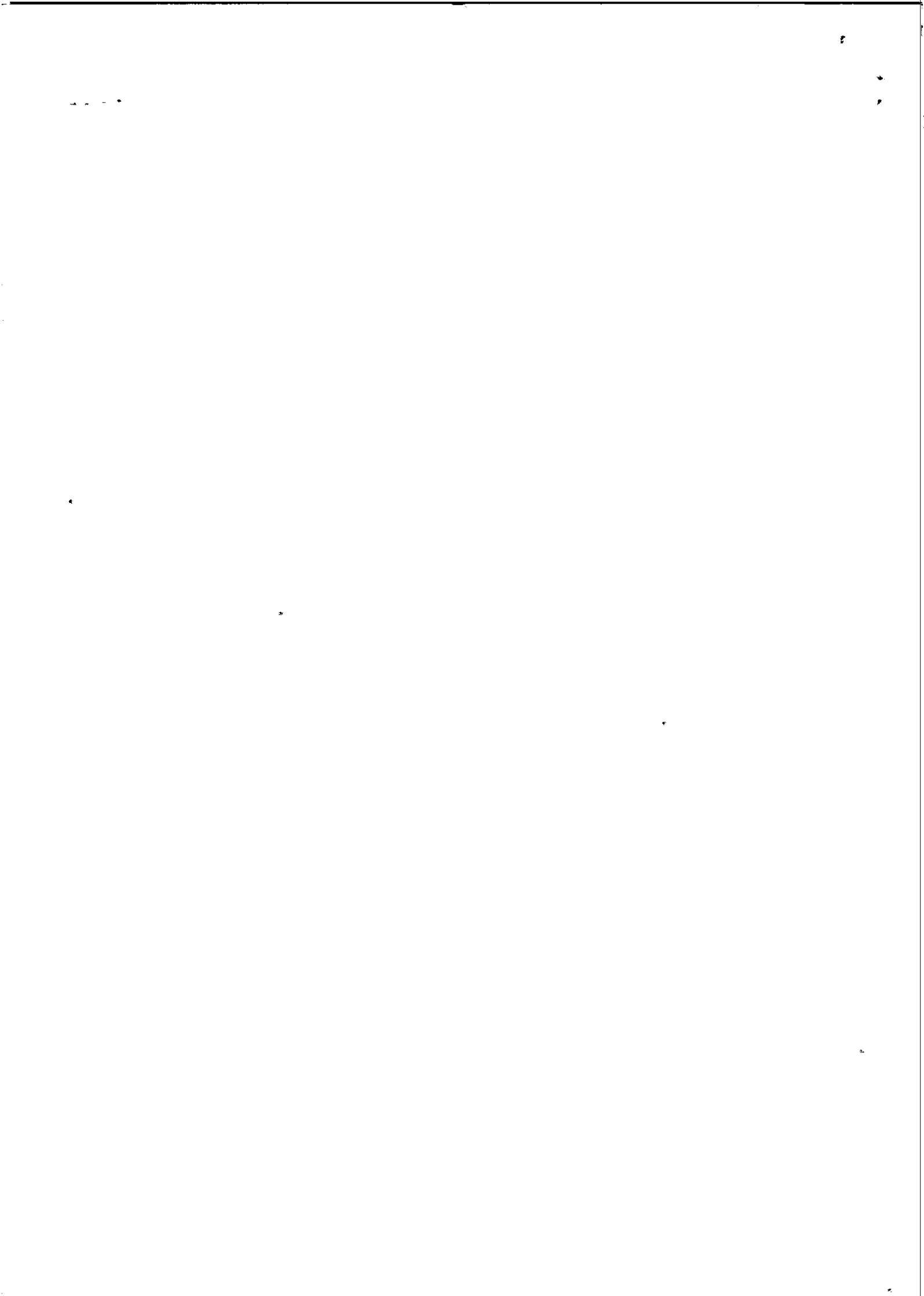
DPI AIYURA STAFF

COMPILED BY

R. MICHAEL BOURKE\*

\*PRINCIPAL HORTICULTURIST,  
DEPARTMENT OF PRIMARY INDUSTRY,  
HIGHLANDS AGRICULTURAL EXPERIMENT STATION,  
AIYURA, P.O. BOX 384,  
KAINANTU, E.H.P.

DECEMBER, 1982



## INTRODUCTION

The Highlands Agricultural Experiment Station at Aiyura is an agricultural research station run by the Papua New Guinea Department of Primary Industry. It was established in 1937. An overview of the work of the Station is given in the 1981 Yearbook (DPI, 1980).

This bibliography covers papers, articles and reports published by Aiyura staff up to the end of 1982. It does not include papers that cover work done before officers came to Aiyura or after they left. Single papers and articles put out in a mimeograph form only are not included, for example, papers given at 1978 DPI Agronomy/Horticulture Conference in Goroka. Unpublished papers which have not been submitted for publication are also excluded. The bibliography covers 120 individual papers plus 12 DPI annual reports and reviews that include contributions by Aiyura staff.

## BIBLIOGRAPHY

- ✓ Aburu, K. (1982). Planting material available from H.A.E.S. Aiyura. H.A.E.S. Tech. Bull. 16.
- Akus, W. L. (1982). New corn variety for the highlands. Harvest 8
- Akus, W. L. (1982). Sweet potato releases from Aiyura. Harvest 8(2):63-66.
- Akus, W. L. (in press). Evaluation of introduced sweet potato cultivars at Aiyura in the Eastern Highlands of Papua New Guinea. Papua New Guinea agric. J.
- ✓ Akus, W. L. and Nema, R. K. (in press). Evaluation of twenty five vegetable species at Aiyura. Papua New Guinea agric. J.
- Akus, W. L. and Nema, R. K. <sup>Bourke, R.M.</sup> (in press). Vegetables for institutions in the highlands. Harvest
- Allen, B. J., Bourke, R. M., Clarke, L. J., Cogill, B., Pain, C. F. and Wood, A. W. (1978). A preliminary report on a child malnutrition and agricultural survey of the Nembi Plateau, Southern Highlands Province. 21pp. Office of Environment and Conservation, Port Moresby.
- 7 1980 ✓ Allen, B. J., Bourke, R. M., Clarke, L. J., Cogill, B., Pain, C. F. and Wood, A. W. (1979). Child malnutrition and agriculture on the Nembi Plateau, Southern Highlands Province, Papua New Guinea. Social Science and Medicine 14D(2):127-132.
- ✓ Anon. (1967). Plant Industry Review - Aiyura Highlands Agricultural Experiment Station. DASF Rural Digest 9(2):8-9.
- ✓ Anon. (1971). Pasture research at Aiyura. Harvest 1(3):87-92.
- ✓ Barrett, J. H. (1965). The occurrence of termites in the New Guinea highlands. Papua New Guinea agric. J. 17(3):95-98.
- ✓ Barrett, J. H. (1966). Control of Lepidiota vogeli Brenske. The brown pasture scarab of the highlands of New Guinea. Papua New Guinea agric. J. 18(1):39-44.
- ✓ Barrett, J. H. (1966). Insect pests of Coffea arabica in the New Guinea highlands. Papua New Guinea agric. J. 18(3):83-100.

- ✓ Barrett, J. H. (1966). The biology and ecology of Lepidiota vogeli, a brown pasture scarab (Family Melolonthidae) of the highlands of New Guinea. Papua New Guinea agric. J. 18(1):25-38.
- ✓ Barrett, J. H. (1967). Heliothis species Lepidoptera: Noctuidae in Papua and New Guinea. Papua New Guinea agric. J. 19(2):61-66.
- ✓ Barrett, J. H. (1967). The biology, ecology and control of Vanapa oberthuri Poill. Coleoptera; Curculionidae in hoop pine Araucaria plantations in New Guinea. Papua New Guinea agric. J. 19(2):47-60.
- ✓ Bourke, R. M. (1978). Research, extension and food crops. In Proc. Fifth Provincial Rural Development Officers' Kivung. Dept. Primary Industry, Konedobu. pp47-48.
- ✓ Bourke, R. M. (1979). Improving food production and nutrition. In Proc. 1979 National Nutrition Conf. J. Eng (Ed.), Dept. Public Health, Konedobu.
- ✓ Bourke, R. M. (1980). Boron deficiency is widespread in the highlands. Harvest 6(4):175-178.
- ✓ Bourke, R. M. (1981). Agriculture in Papua New Guinea. Alafua Agricultural Bull. 6(3):77-82.
- ✓ Bourke, R. M. (1981). Some little known food crops from Papua New Guinea. IBPGR Southeast Asia Newsletter 5(1):6-8. Also Science in New Guinea 8(3):164-170.
- ✓ Bourke, R. M. (1982). Agronomic field trials on food crops in Papua New Guinea: 1928 to 1978. Tech. Report 82/3. Dept. Primary Industry, Port Moresby.
- ✓ Bourke, R. M. (1982). Compost helps bananas grow. Harvest 8
- ✓ Bourke, R. M. (1982). Crop research projects in Papua New Guinea. Papua New Guinea Agric. Soc., Maprik. 16pp.
- ✓ Bourke, R. M. (1982). Growing sweet potato for sale in the highlands. Harvest 8 (2):47-58.
- ✓ Bourke, R. M. (1982). Oenanthe Rungia. In Edible Horticultural Crops. C. Hackett and J. Carolane (Eds.). Academic Press, Sydney. p28, 32.
- ✓ Bourke, R. M. (1982). Root crops in Papua New Guinea. In Proc. Second Papua New Guinea Food Crops Conf. R. M. Bourke and V. Kesavan (Eds.). Dept. Primary Industry, Port Moresby. pp51-63.
- ✓ Bourke, R. M. (1982). Self-sufficiency in horticultural crops in South Pacific countries. South Pacific J. Natural Science 3:31-43.
- ✓ Bourke, R. M. (1982). Sweet potato in Papua New Guinea. Proc. First International Symposium Sweet Potato. AVRDC, Taiwan.
- ✓ Bourke, R. M. (in press). Growth analysis of four sweet potato (Ipomoea batatas (L) Lam.) cultivars in Papua New Guinea. Submitted to the 6th Symposium of the International Society for Tropical Root Crops. Lima, Peru.
- ✓ Bourke, R. M. (in press). Improving food production and people's nutrition. Harvest

- ✓ Bourke, R. M. (in press). Influence of nitrogen and potassium on growth of sweet potato (*Ipomoea batatas* (L) Lam.) in Papua New Guinea. Submitted to the 6th Symposium of the International Society for Tropical Root Crops. Lima, Peru.
- ✓ Bourke, R. M. (in press). Micronutrient deficiencies in crops in Papua New Guinea. D.P.I. Tech. Report
- ✓ Bourke, R. M. (in press). Sweet potato (*Ipomoea batatas*) production and research in Papua New Guinea. Papua New Guinea agric. J.
- ✓ Bourke, R. M. (in press). Systems of agriculture. In Nembi Plateau Report. B. J. Allen (Ed.). Australian National University, Canberra.
- Bourke, R. M. (in press). The altitudinal range of coffee and some associated shade crops in Papua New Guinea. Coffee Industry Board Newsletter 2
- Bourke, R. M. and Aburu, K. (1982). Bibliography of fruit and nuts in Papua New Guinea. D.P.I. Tech. Report 82/1.
- Bourke, R. M. and Allen, B. J. (1979). Subsistence agriculture and child malnutrition in the Okapa area, E.H.P. Office of Environment and Conservation, Port Moresby. 20pp.
- Bourke, R. M., Carrad, B. and Heywood, P. (1981). Papua New Guinea's Food Problems: Time for Action. Dept. Primary Industry Resear. Bull. 29.
- Bourke, R. M. and D'Souza, E. (1982). Intensification of subsistence agriculture on the Nembi Plateau: preliminary results. In Proc. Second Papua New Guinea Food Crops Conf. R. M. Bourke and V. Kesavan (Eds.). Dept. Primary Industry, Port Moresby. pp202-207.
- Bourke, R. M., Evenson, J. P. and Keating, B. A. (in press). The relationship between the altitudinal limit of cassava and soil temperature in Papua New Guinea. Presented to 6th Symposium of the International Society for Tropical Root Crops. Lima, Peru.
- Bourke, M., Lambert, J., Leach, D. and Pais, E. (1979). Recommendations for a community based nutrition improvement programme for the Kiunga District of the Western Province, Papua New Guinea. Melanesian Council of Churches, Port Moresby.
- Bourke, R. M. and Lea, D.A.M. (1982). Subsistence horticulture in Enga Province. In Enga: Foundations for Development. B. Carrad, D.A.M. Lea and K. K. Talyaga (Eds.). Enga Provincial Government and Geography Department, University New England.
- Bourke, R. M. and Tarepe, T. (in press). Locations for commercial citrus production in Papua New Guinea. Harvest
- ✓ Bull, P. B. and Bourke, R. M. (in press). What introduced vegetables can be grown in lowland Papua New Guinea. Harvest
- ✓ Calcinai, B. (1981). Food production and consumption at educational institutions. Papua New Guinea Education Gaz. 15(2):32-34.
- ✓ Calcinai, B. (1982). Food crop cultivation - Teachers Resource Book. Dept. Education, Port Moresby.
- Calcinai, B. and Bourke, R. M. (1982). Institutional food production and consumption in Eastern Highlands and Enga Provinces. In Proc. Second Papua New Guinea Food Crops Conf. R. M. Bourke and V. Kesavan (Eds.). Dept. Primary Industry, Port Moresby. pp184-

- ✓ Carne, R. S. (1966). A fertilizer leaf spray for coffee. Papua New Guinea agric. J. 18(2):80.
- ✓ Carne, R. S. (1966). Single-stem pruning of coffee. Papua New Guinea agric. J. 18(2):81-82.
- ✓ Carne, R. S. and Charles, A. E. (1966). Agronomic research on Arabica coffee in Papua and New Guinea - Progress report. Papua New Guinea agric. J. 18(2): 47-61.
- ✓ Carrad, B. and Bourke, R. M. (1982). Introduced vegetables, fruit and nuts in Enga. In Enga: Foundations for Development. B. Carrad, D.A.M. Lea and K. K. Talyaga (Eds.). Enga Provincial Government and Geography Dept., University New England.
- DASF (1972). Department of Agriculture, Stock and Fisheries. Annual Report 1967-69. Port Moresby. (See also Annual Reports for 1959-60, 1960-61, 1961-63, 1963-64, 1964-65, 1965-66, 1966-67.)
- DASF (1973). Highlands Agricultural Experiment Station, Aiyura, Field Day, October, 1973. Summer Institute of Linguistics, Ukarumpa.
- Department of Agriculture (1941). Annual report of the Department of Agriculture for the year ending 30th June, 1940. New Guinea agric. Gaz. 7(2):77-116.
- ✓ DPI (1980). Highlands Agricultural Experiment Station, Yearbook 1981. Summer Institute of Linguistics, Ukarumpa.
- D'Souza, E. and Bourke, R. M. (1982). Compost increases sweet potato yields in the highlands. Harvest 8
- D'Souza, E. and Bourke, R. M. (in press). Improving subsistence agriculture on the Nembi Plateau. Harvest
- D'Souza, E. and Bourke, R. M. (in press). Intensification of subsistence agriculture, Nembi Plateau. 1. General introduction and inorganic fertilizer trials. Papua New Guinea agric. J.
- D'Souza, E. and Bourke, R. M. (in press). Intensification of subsistence agriculture, Nembi Plateau. 2. Organic fertilizer trials. Papua New Guinea agric. J.
- ✓ D'Souza, E. and Bourke, R. M. (in press). Intensification of subsistence agriculture, Nembi Plateau. 4. Overall conclusions and recommendations. Papua New Guinea agric. J.
- ✓ D'Souza, E. and Bourke, R. M. (in press). Subsistence agriculture intensification research project. In Nembi Plateau Report. B. J. Allen (Ed.). Australian National University, Canberra.
- D'Souza, E., Bourke, R. M. and Akus, W. L. (in press). Intensification of subsistence agriculture, Nembi Plateau. 3. Sweet potato cultivar trials; crop rotation and fallow species trials; and crop introductions. Papua New Guinea agric. J.
- Gamble, W. K., Bourke, R. M. and Brookson, C. W. (1981). South Pacific Agricultural Research Study. Consultants' Report to the Asian Development Bank. International Service for National Agricultural Research, The Hague.
- ✓ Henty, E. E. and Pritchard, G. H. (1975). Weeds of New Guinea and their control, Botany Bull. 7. Dept. Forests, Lae.

- ✓ Hoy, G.S.M. (1968). Citrus - some notes. DASF Rural Digest 9(6):14-22.
- ✓ Hoy, G.S.M. (1969). Cinchona. DASF Rural Digest 10(5):1-35.
- ✓ Kimber, A. J. (1967). The development of farming systems and the need for farm planning in the New Guinea Highlands. Papua New Guinea agric. J. 19(3): 99-111.
- ✓ Kimber, A. (1968). Soybean in the New Guinea Highlands. DASF Rural Digest 10(1): 13-16.
- Kimber, A. J. (1970). Some cultivation techniques affecting yield response in sweet potato. In Proc. Second Internat. Sympos. Trop. Root Tuber Crops. D. L. Plucknett (Ed.). University Hawaii. pp32-36.
- Kimber, A. J. (1971). Cultivation practices with sweet potato. Harvest 1(1):31-33.
- Kimber, A. J. (1972). The sweet potato in subsistence agriculture. Papua New Guinea agric. J. 23(3,4):80-102.
- ✓ Kimber, A. J. (1972). Widespread damage by insect pests in highlands sweet potato gardens. Harvest 2(4):117-121.
- ✓ Kimber, A. J. (1973). Wet pig dung - its effect on sweet potato yields. In Proc. Workshop on Waste Recycling Systems. University Papua New Guinea, Port Moresby.
- Kimber, A. J. (1974). Crop rotations, legumes and more productive arable farming in the highlands of Papua New Guinea. Science in New Guinea 2:70-79.
- Kimber, A. J. (1974). Future development and utilization of root crops. In Proc. Papua New Guinea Stockfeeds Conf. Paper 6.1. D.A.S.F., Konedobu.
- Kimber, A. J. (1974). The prospects and problems of grain and root production. The highlands. In Proc. Papua New Guinea Stockfeeds Conf. Paper 4.1. D.A.S.F., Konedobu.
- Kimber, A. J. (1976). Costs and returns from growing sweet potato. In 1975 Papua New Guinea Food Crops Conf. Proc. K. Willson and R. M. Bourke (Eds.). Dept. Primary Industry, Port Moresby. pp313-316.
- Kimber, A. J. (1976). Some factors influencing the protein content of sweet potato. In 1975 Papua New Guinea Food Crops Conf. Proc. K. Willson and R. M. Bourke (Eds.). Dept. Primary Industry, Port Moresby. pp63-74.
- Kimber, A. (1976). Supersweet corn from Hawaii. Harvest 3(1):6-7.
- Kimber, A. J. (1977). Assessment of grain soya bean yield in the highlands of Papua New Guinea. In Agriculture in the Tropics. B.A.C. Enyi and T. Varghese (Eds.). University Papua New Guinea. pp420-432.
- ✓ Kimber, A. J. (1977). Cereal grains in the highlands. H.A.E.S. Tech. Bull. 2.
- ✓ Kimber, A. J. (1977). Pink disease in coffee. H.A.E.S. Tech. Bull. 6.
- ✓ Kimber, A. J. (1977). Prospects for grain sorghum, maize and soybean in the highlands. In Proc. Highlands Grain Industry Seminar. I. M. Cooper (Ed.). Highlands Agricultural College, Mt. Hagen.
- ✓ Kimber, A. J. (1977). Sweet potato. Farming Notes 9. Dept. Primary Industry, Port Moresby.

- Kimber, A. J. (1980). Fertilizing sweet potato on mineral soils in the highlands. H.A.E.S. Tech. Bull. 14. Also Harvest 8(2):71-76.
- ✓ Kimber, A. J. (1980). Growing sweet potato on organic soils in the highlands. H.A.E.S. Tech. Bull. 15. Also Harvest 8(2):77-80.
- Kimber, A. J. (1982). The effect of pig dung on sweet potato yields. Harvest 8(2):81-82.
- ✓ Kimber, A. J. and Calcinaï, B. L. (1980). An easy way to control cut worms. H.A.E.S. Tech. Bull. 13.
- ✓ Kimber, A. J. and Vance, P. N. (1977). Peanuts. Farming Notes 7. Dept. Primary Industry, Port Moresby.
- Moles, D. J., Rangai, S.S., Bourke, R. M. and Kasamani, C. T. (in press). Fertilizer responses of taro (Colocasia esculenta) in Papua New Guinea. Presented at Second Internat. Aroid Sympos., Fiji. Nov., 1981.
- ✓ Nitsche, J., Charles, A. E., Detmers, G., Smith, E.S.C. and Kimber, A. J. (1977). Arabica coffee. Farming Notes 21. Dept. Primary Industry, Port Moresby.
- ✓ Petty, D. (1967). Pastures at Aiyura. DASF Rural Digest 9(3):3-4.
- ✓ Pritchard, G. H. (1971). Weed control in coffee. Harvest 1(3):102-108.
- Pritchard, G. H. (1971). Weed control in coffee in the New Guinea highlands. Papua New Guinea agric. J. 22(2):87-115.
- ✓ Pritchard, G. H. (1972). A comparison of weed control programmes in coffee. Harvest 2(1):24-27.
- Quinlin, T. J. (1968). Cultivation of pyrethrum in Papua and New Guinea. DASF Rural Digest 9(5):7-13.
- Schindler, A. J. (1952). Land use by natives of Aiyura village, Central Highlands, New Guinea. South Pacific 6:302-307.
- ✓ Schindler, A. J. (1959). Pyrethrum in the Highlands of New Guinea. Papua New Guinea agric. J. 12(1):1-8.
- ✓ Schindler, A. J. and Fraser, R. R. (1964). Cover crops, mulch or clean weeding for coffee (Coffea arabica) in the highlands of New Guinea. Papua New Guinea agric. J. 17(1):39-47.
- ✓ Siki, B. F. (1979). Potato growing. H.A.E.S. Tech. Bull. 7.
- ✓ Siki, B. F. (1979). Processing and storage of root crops in Papua New Guinea. H.A.E.S. Tech. Bull. 11.
- ✓ Siki, B. F. (1979). Review of storage and processing of root crops in Papua New Guinea. In Small Scale Processing and Storage of Tropical Root Crops. D. L. Plucknett (Ed.). Westview Tropical Agriculture Series No. 2.
- ✓ Siki, B. F. (1979). Use of coffee pulp as organic manure on sweet potato. H.A.E.S. Tech. Bull. 8.
- Siki, B. F. (1980). Coffee pulp as manure on sweet potato. Harvest 6(1):1-4.
- Siki, B. F. (in press). Effect of coffee pulp on sweet potato (Ipomoea batatas (L) Lam.) yield. Papua New Guinea agric. J.

- ✓ Smith, E.S.C. (1977). Coffee insects. H.A.E.S. Tech. Bull. 4.
- ✓ Smith, E.S.C. (1977). Control of green scale on coffee. H.A.E.S. Tech. Bull. 1.
- ✓ Smith, E.S.C. (1977). Dung beetles. H.A.E.S. Tech. Bull. 5.
- ✓ Smith, E.S.C. (1977). Potato viruses and potato aphids. In Proc. Potato Seminar, H.A.E.S., Aiyura. Highlands Agricultural College, Mt. Hagen.
- ✓ Smith, E.S.C. (1979). Dung beetles. Harvest 5(2):80-83.
- ✓ Szent-Ivany, J.J.H. and Barrett, J. H. (1956). Some insects of bananas in the Territory of Papua and New Guinea. Papua New Guinea agric. J. 11(1):40-44.
- Tarepe, T. N. (1979). Growing strawberries. H.A.E.S. Tech. Bull. 9.
- ✓ Tarepe, T. N. (in press). Naranjilla: A new fruit for the highlands. Harvest
- ✓ Tarepe, T. N. (in press). Ripening bananas quickly. Harvest
- Tarepe, T. and Bourke, R. M. (1982). Fruit crops in the Papua New Guinea highlands. In Proc. Second Papua New Guinea Food Crops Conf. R. M. Bourke and V. Kesavan (Eds.). Dept. Primary Industry, Port Moresby. pp86-100.
- ✓ Teke, W. (1980). Tok save long stroberi. H.A.E.S. Aiyura Toktok 3.
- Thiagalingam, K. and Bourke, R. M. (1982). Utilization of organic wastes in crop production. In Proc. Second Papua New Guinea Food Crops Conf. R. M. Bourke and V. Kesavan (Eds.). Dept. Primary Industry, Port Moresby. pp218-226.
- ✓ Toneba, P. (1980). Carp fingerling breeding and distribution. H.A.E.S. Tech. Bull. 10.
- ✓ van Hecke, W. (1977). A simple method of establishing contour lines in the field. H.A.E.S. Tech. Bull. 3.
- ✓ van Hecke, W. (1979). A method of working out contour lines in the field. Harvest 5(3):152-158.
- ✓ van Hecke, W. (1980). A note on spacing between contour lines. Harvest 6(1):39-40.
- ✓ van Horck, K. H. (1971). Vegetable growing. Harvest 1(2):42-45.
- ✓ van Horck, K., Kimber, A. and Teke, W. (1978). Tok save long Arabika kopi. H.A.E.S. Aiyura Toktok 2. Dept. Primary Industry, Aiyura.
- ✓ Wally, P. B. (no date). Pastures and livestock at Aiyura. H.A.E.S. Tech. Bull. 12.