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HOST PLANT AND DISTRIBUTION RECORDS OF SOME INSECTS IN NEW GUINEA AND ADJACENT ISLANDS

By J. J. H. Szent-Ivany and A. Catley

DEPARTMENT OF AGRICULTURE, STOCK AND FISHERIES,
PORT MORESBY

In this paper 41 host plants and 50 distribution records of some insects¹ are listed from 13 of the 15 districts of the Territory of Papua and New Guinea. The boundaries of the various districts are shown on a map in a previous article by Szent-Ivany (1959). The families within the orders, the genera within the families and the species within the genera are listed in alphabetical order. The generic and specific names of the insects are printed in bold-face type, the names of the plants in italics. In some cases ecological and ethological remarks are made; these are found after the name of the host plant and before the name of the locality where the insects were found in association with the host plant. The locality name is followed by the date of collection. Finally the name of the collector² is mentioned in parentheses. If a host plant is mentioned from more than one locality the ecological remarks follow the corresponding localities. The following abbreviations are used: NE NG—Northeast New Guinea; E. Hlds.—Eastern Highlands; S. Hlds.—Southern Highlands; W. Hlds.—Western Highlands; W. Distr.—Western District; C. Distr.—Central District; N. Distr.—Northern District.

ORTHOPTERA

Gryllidae

Cardiodactylus novae-guineae Haan. *Coffea robusta*: Bemari, Maiwara and Rabe, Milne Bay Distr., Papua, Sept. 1959 (K. S. Cole).

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2. The names of the authors are mentioned thus: J. J. H. Szent-Ivany: "Sz. I.", A. Catley: "A. C."

HEMIPTERA – HETEROPTERA

Lygaeidae

Astacops dorycus Boisd. *Cocos nucifera*, fronds: Dolam Plantation, Lihir Is., 20 July 1955 (Sz. I.).

Astacops flavicollis Walk. *Theobroma cacao*, pods: Sangara Estate, N. Distr., Papua, March 1956 (Sz. I.).

Graptostethus servus Fabr. *Gossypium hirsutum*, on cotton bolls and foliage: Bereina (Agr. Station), C. Distr., Papua, 21 Dec. 1959 (Sz. I. & A. C.).

Nysius epiensis China. *Arachis hypogaea*: Bubia (Agr. Exp. Station), near Lae, Morobe Distr., NE NG, 21 Apr. 1959 (J. H. Ardley).

Miridae

Pseudodoniella laensis Mill. *Theobroma cacao*, dense populations on pods, stem and branches: Amele village Plantation, Madang Distr., NE NG, 28–29 June 1959 (Sz. I.). So far, this species was known only from the Markham Valley (Morobe Distr., Miller 1957).

Pentatomidae

Agapophyta bipunctata Boisd. *Cocos nucifera*, fronds of young palms: Dolam Plantation, Lihir I., New Ireland Distr., 20 July 1955 (J. Sciortino & Sz. I.). *Methroxylon rumphii*: Peto village, near Kerema, Gulf Distr., Papua, 9 May 1959 (A. C.).

Amorbus rhombeus Westw. *Oryza sativa*, panicles: Kairuku, C. Distr., Papua, 1 June 1945 (B. A. O'Connor).

Megymenum papuense Dist. *Cucurbita pepo*: Brown River area (Experiment. blocks of the Department of Agriculture), 44 km N of Port Moresby, C. Distr., Papua, Oct. 1958 (Sz. I.); Kulili Plantation, Kar Kar I., Madang Distr., NE NG, 11 Mar. 1960 (Sz. I.).

Philia femorata Walk. *Arachis hypogaea*: Chambri, Sepik Distr., NE NG, 7 Aug. 1957 (K. G. Newton). *Lantana camara*: Mahurl Is., New Ireland Distr., 22 July 1955 (Sz. I.).

Tectocoris lineola var. **cyanipes** F. *Gossypium hirsutum*: Sasiang, Markham Valley, Morobe Distr., NE NG, 15 Oct. 1959 (J. H. Ardley).

Pyrrhocoridae

Dysdercus cingulatus Fabr. *Gossypium hirsutum*, on foliage and bolls: Bereina (Agr. Station), C. Distr., Papua, 21 Dec. 1959 (Sz. I. & A. C.); Sasiang, Markham Valley, Morobe Distr., NE NG, 15 Oct. 1959 (J. H. Ardley).

Dysdercus sidae Montr. *Gossypium hirsutum* (cotton bolls and foliage): Bereina (Agr. Station), C. Distr., Papua, 21 Dec. 1959 (Sz. I. & A. C.).

Tingidae

Stephanitis typica (Distant). *Musa sapientum*, leaves: Karaita village, near Kerema, Gulf Distr., Papua, 8 May 1959 (Sz. I. & A. C.).

HEMIPTERA – HOMOPTERA

Aphididae

Oregma (Ceratovacuna) lanigera Zehntner. *Saccharum officinarum*: Aroa Estate, Hisiu Beach area, C. Distr., 11 Aug. 1959 (Sz. I.); Samarai, Milne Bay Distr., Papua, Sept. 1959 (K. S. Cole).

Cercopidae

Clovinia fasciata Lall. *Theobroma cacao*: Numa Numa Plantation, Bougainville Distr., 20 June 1957 (J. H. Barrett).

Coccidae

Aspidiotus destructor (Sign.). *Cocos nucifera*, leaves: Wau, Morobe Distr., NE NG, 1100 m, Aug. 1959 (Sz. I.).

Dysmicoccus brevipes (Ckll.). *Ananas comosus*, heavy infestation of fruit; species tended by the formicid *Anoplolepis longipes* Jerd.: Balupwini village, near Maprik, Sepik Distr., NE NG, 21 June 1959 (Sz. I.).

Ceroplastodes chiton Green. *Anona muricata*, tended by the formicid *Oecophylla smaragdina* F.: Bubia (Agr. Exper. Station), near Lae, Morobe Distr., NE NG, 13 Mar. 1959 (J. H. Ardley). *Carica papaya*, dense populations on fruit; Port Moresby, C. Distr., Papua, 23 Sept. 1959 (Mrs. G. Charles). *Theobroma cacao*: Waigani Plantation, Milne Bay Distr., Papua, Sept. 1959 (K. S. Cole).

Ferrisia virgata (Ckll.). *Coffea robusta* and *Leucaena glauca*, dense populations on both plants: Dogura (Anglican Mission), Milne Bay Distr., Papua, 29 June 1959 (W. J. B. Heath). *Lycopersicum esculentum*: Port Moresby, C. Distr., Papua, 5 Oct. 1959 (J. J. Dwyer). *Manihot utilissima*: Hisiu village, C. Distr., Papua, 10 Aug. 1959 (Sz. I.). *Theobroma cacao*: Waigani Plantation, Milne Bay Distr., Papua, Sept. 1959 (K. S. Cole).

Hemiberlesia lataniae (Sign.). *Cocos nucifera*, on the leaves of dwarf variety: Hisiu village, C. Distr., Papua, 11 Aug. 1959 (Sz. I.). *Coffea robusta*: Laloki, near Port Moresby, C. Distr., Papua, 6 Feb. 1960 (A. C.).

Hemiberlesia palmae (Morg. & Ckll.). *Cocos nucifera*: Hisiu village, C. Distr., Papua, 11 Aug. 1959 (Sz. I.), associated with *H. lataniae* (Sign.) on the leaves of dwarf variety; Wau, Morobe Distr., NE NG, 1100 m, (Sz. I.). *Coffea robusta*, leaves: Laloki, near Port Moresby, C. Distr., Papua, 5 Feb. 1960 (A. C.).

Ichnaspis longirostris (Sign.). *Coffea robusta*: Laloki, near Port Moresby, C. Distr., Papua, 6 Feb. 1960 (A. C.).

Nipaecoccus vastator (Mask.). *Punica granata*: Port Moresby, C. Distr., Papua, 28 Aug. 1957 (Miss E. Edwards).

Paraputo leverii (Green). *Coffea robusta*, roots: Inanianene village, Milne Bay Distr., Papua, Sept. 1959 (K. S. Cole). This species was also found on roots of *Cocos nucifera* and *Ficus* in various places in the British Solomon Islands (Williams 1960.).

Planococcus citri (Risso). *Anona muricata*, dense populations on fruit associated with sooty mould and tended by the formicid *Technomyrmex* sp.: Bainyik (Agr. Station) near Maprik, Sepik Distr., NE NG, June 1959 (J. Griffiths & Sz. I.). *Boehmeria ensiformis*, tended by the formicid *Anoplolepis longipes* Jerd.: Laloki, near Port Moresby, C. Distr.,

Papua, 6 Feb. 1960 (Sz. I.). *Leucocyge* sp. (Fam. Urticaceae): Naramgo village, near Maprik, Sepik Distr., NE NG, 19 June 1959 (Sz. I.). *Theobroma cacao*: Amele village Plantation, Madang Distr., NE NG, 29 June 1959 (Sz. I.).

Planococcus lilacinus (Ckll.). *Theobroma cacao*, causing severe damage to the tips of laterals of young trees: Lalcki, near Port Moresby, C. Distr., Papua, 6 Feb. 1960 (Sz. I.).

Saissetia nigra Nietn. *Hevea brasiliensis*, seedlings: Koitaki Estate, C. Distr., Papua, 25 Oct. 1959 (Sz. I.). *Abelmoschus manihot*, dense populations on branches: Naramgo village, near Maprik, Sepik Distr., NE NG, 19 June 1959 (Sz. I.).

Steatococcus samaraius Morr. *Tephrosia candida*, planted as shade tree in coffee plantation: Wau, Morobe Distr., NE NG, 1100 m, 3 Aug. 1959 (Sz. I.).

Flatidae

Colgar tricolor Dist. *Coffea arabica*: Kainantu, E. Hlds. Distr., NE NG, 1800 m, 18 Oct. 1955 (Sz. I.). *Hevea brasiliensis*, very dense populations on the twigs of one year old seedlings: Koitaki Estate, C. Distr., Papua, 25 Aug. 1959 (E. Kanjiri & Sz. I.). *Theobroma cacao*: Kaviak Plantation, Kar Kar I., Madang Distr., NE NG, 19 Nov. 1958 (J. H. Ardley).

Paratella miniata Mcl. *Theobroma cacao*: Kaviak Plantation, Kar Kar I., Madang Distr., NE NG, 19 Nov. 1958 (J. H. Ardley).

LEPIDOPTERA

Cossidae

Zeuzera coffeae Nietn. *Gossypium hirsutum*, larvae in stem: Bereina (Agr. Station), C. Distr., Papua, 21 Dec. 1959 (Sz. I. & A. C.).

Geometridae

Milinia isodoxa Prout. *Araucaria cunninghami*: Aiyura (Highlands Agr. Exp. Station), E. Hlds. Distr., NE NG, 1800–1900 m, 18 Nov. 1957 (J. H. Barrett); Goroka, E. Hlds. Distr., NE NG, 1800 m, July 1959 (Sz. I.).

Semiothisa funebris Warr. *Albizzia fulva*: Goroka, E. Hlds. Distr., NE NG, 23 May 1958 (J. H. Barrett); Lunapieve Plantation, Asaro Valley, E. Hlds. Distr., NE NG, July 1959 (Sz. I.).

Lasiocampidae

Darala rubeola Feld. *Cocos nucifera*, larvae rest during the day under fibrous cover of the leaf axil of young palms; they feed on the fronds at night; pupal period 20 days: Yambi (Agr. Station), Sepik Distr., NE NG, Feb. 1960 (J. Johnston & Sz. I.).

Limacodidae

Marasma inconspicua B. Bak. *Theobroma cacao*: Bubia (Agr. Exp. Station), near Lae, Morobe Distr., NE NG, Dec. 1955 (J. Brisbane).

Pinzulenza kukisch Her. *Theobroma cacao*: Dylup Plantation, Madang Distr., NE NG, March 1960 (Sz. I.).

Scopelodes dinawa B. Bak. *Cassia* sp.: Keravat (Lowlands Agr. Exp. Station), New Britain Distr., May 1958 (G. S. Dun). This species was found earlier in New Guinea on *Mangifera indica* and *Musa textilis* (Szent-Ivany 1955).

Scopelodes nitens B. Bak. *Musa sapientum*, larva gregarious on leaves. The yellowish green coloured larva has a near hyaline semi-transparent longitudinal line dorsally and two similar lines laterally. It is armed with 2 dorsal and 2 lateral rows of spined hairy appendages, one on each side. There are 11 spined appendages in the dorsal rows, the 2nd and 3rd, and the 9th, 10th and 11th being longer than the others. The lateral rows have 7 appendages. There is one black spine on each side of the last abdominal segment. The head capsule is brownish hyaline, the mandibulae are brown. The whole ventral surface is hyaline. Upon contact with the human skin, the "nettle hairs" of the spined appendages cause a sharp pain. The roundish cocoons are light brownish grey coloured: Kukwal village, near Maprik, Sepik Distr., NE NG (H. Standfast & Sz. I.) This species was found earlier by the authors on *Anacardium occidentale* (Szent-Ivany 1959).

Lycaenidae

Pseudonotis panisoides Niceev. *Vanilla planifolia*, flowers: Bubia (Agr. Exp. Station), Morobe Distr., NE NG, 1 Nov. 1959 (J. H. Ardley).

Notodontidae

Osica turneri B. Bak. *Erythrina* sp., leafroller: Keravat (Lowlands Agr. Exp. Station), New Britain Distr., 12 Oct. 1959 (G. S. Dun).

Noctuidae

Pericyma cruegeri Butl. *Delonyx regia*, complete defoliation of trees: Awala Plantation, N. Distr., Papua, 29 Apr. 1960 (Sz. I.); Popondetta (Governm. Station), N. Distr., Papua, 28 Apr. 1960 (Sz. I.); Tapini, Goilala Subdistr., C. Distr., Papua, 1000 m, 12 May 1960 (Sz. I.). *Peltophorum ferrugineum*: Haugata Plantation, N. Distr., Papua, 29 Apr. 1960 (Sz. I.); Port Moresby, C. Distr., Papua, Apr.-May 1960 (Sz. I.).

Polydesma umbricola Bsd. *Albizzia stipulata*: Aiyura (Highlands Agr. Exp. Station), E. Hlds. Distr., NE NG, 1900 m, 29 Nov. 1957 (J. H. Barrett).

Plusia orichalcea F. *Coffea arabica*: Aiyura (Highlands Agr. Exp. Station), NE NG, 1800-1900 m, Apr. 1959 (J. H. Barrett).

Prodenia litura F. *Hevea brasiliensis*, seedlings: Koitaki Estate, C. Distr., Papua, 1 May 1956 (Sz. I.).

Sesamia grisescens Warr. *Saccharum* sp., stem borer: Goroka, E. Hlds. Distr., NE NG, 1800 m, 15 July 1959 (J. H. Barrett); Bubia (Agr. Exp. Station), near Lae, Morobe Distr., NE NG, 22 July 1959 (F. J. Simmonds).

Tiracola plagiata Walk. *Crotalaria anagyroides*, dense populations: Sumvarapa plantation, N. Distr., Papua, Apr. 1960 (Sz. I.).

Nymphalidae

Neptis shepherdii Moore. *Coffea robusta*: Bainyik (Agr. Station), near Maprik, Sepik

Distr., NE NG, Feb. 1960 (Sz. I.).

Pyalidae

Dichocrosis punctiferalis Guen. *Gossypium hirsutum*, larva bores into cotton bolls: Bereina (Agr. Station), C. Distr., Papua, 21 Dec. 1959 (A. C.).

Tirathaba ignevena Hmps. *Cocos nucifera*, larva feeds on inflorescence and on immature nuts: Daru, W. Distr., Papua, Dec. 1959 (F. J. Broekhals).

Tortricidae

Homona coffearia Nietn. *Mentha* sp.: Keravat (Lowlands Agr. Exp. Station), New Britain Distr., Sept. 1959 (G. S. Dun).

COLEOPTERA

Cetoniidae

Protaetia advena Jans. *Erythrina indica*: Port Moresby, C. Distr., Papua, 3 Oct. 1957 (D. DeGraaff).

Chrysomelidae (s. l.)

Aulacophora abdominalis F. *Manihot utilissima*: Arawa Plantation, Bougainville Distr., 6 May 1958 (G. S. Dun).

Aulacophora wallacei Baly. *Crotalaria anagyroides*: Goroka, E. Hlds. Distr., NE NG, 20 Jan. 1956 (J. H. Barrett).

Lema papuana Jac. *Musa sapientum*, *Musa textilis*: Bubia (Agr. Exp. Station), near Lae, Morobe Distr., NE NG, July 1959 (Sz. I.).

Curculionidae

Amorphaidea bicolor Fst. *Gossypium hirsutum*, dense populations in flowers: Bereina (Agr. Station), C. Distr., Papua, 21 Dec. 1959 (Sz. I. & A. C.).

Eupholus browni Bates. *Theobroma cacao*: Keravat (Lowlands Agr. Exp. Station), New Britain Distr., 10 Aug. 1959 (G. S. Dun).

Hypotactus ruralis Fst. *Manihot utilissima*: Ulu I., Duke of York Group, New Britain Distr., 30 March 1959 (Sz. I.).

Lophotectes penicilliger (Heller). *Cocos nucifera*, inflorescence: Linga Linga Plantation, New Britain Distr., 15 July 1958 (A. Catley).

Mecopus doryphorus Quoy & Gaim. *Theobroma cacao*, pods: Keravat (Lowlands Agr. Exp. Station), New Britain Distr., Oct. 1959 (G. S. Dun).

Oribius destructor Mshl. *Phaseolus vulgaris*: Mendi, S. Hlds. Distr., Papua, Apr. 1960 (P. Owers). This is a very polyphagous species which was recorded earlier from the E. and W. Hlds. Distrs. (Marshall 1957, Szent-Ivany 1958).

Rhabdoscelus obscurus Bdv. *Cocos nucifera*, log: Bubia (Agr. Exp. Station), Morobe Distr., NE NG, 5 Aug. 1958 (J. H. Ardley). *Saccharum* sp., stem: Aiyura (Highlands Agr. Exp. Station), E. Hlds. Distr., NE NG, 19 July 1959 (J. H. Barrett).

Nitidulidae

Lasiodactylum notabilis Oliff. *Syzygium malaccense*: Bubia (Agr. Exp. Station), Morobe Distr., NE NG, 6 Apr. 1959 (J. H. Ardley).

HYMENOPTERA

Formicidae

Tetramorium guineense (L.). *Pterocymbium beccarii*, seriously damaging stacks of sawn timber: Keravat (Sawmill), New Britain Distr., Feb. 1960 (S. J. Colwell).

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