NOTES ON ARADIDAE FROM CHINA AND INDIA

(Hemiptera-Heteroptera)

By Nicholas A. Kormilev¹

Abstract: Two new species of Mezira A.S., 1843 are described from China: M. termitophila, n. sp. from termite nests and M. stysi, n. sp. Notes and new records are given for Neuroctenus taiwanicus Kormilev, 1955 (from termite nests), Parapictinus ovatus Kormilev, 1956, and Signocoris kaszabi Hoberlandt, 1958, from India.

By the kind offices of Dr Pavel Štys, Natural History Faculty, Karlovy University, Praha, I have had the privilege of studying a small but interesting lot of Aradidae from China and India, for which I express my sincere gratitude.

In this lot, 2 species of the genus *Mezira* A.S., 1843, s. str. were new and are described below. In addition, there were specimens of a very rare species, *Signocoris kaszabi* Hoberlandt, 1958, and *Parapictinus ovatus* Kormilev, 1956.

All measurements in this lot were taken with a micromillimeter eyepiece, 25 units = 1 mm. In the ratios, the 1st figure indicates the length, and the 2nd the width of the measured portion. For convenience, the length of the abdomen was taken from the tip of the scutellum to the tip of the hypopygium (δ), or segment IX (\mathfrak{P}), respectively.

Subfamily CARVENTINAE

Genus SIGNOCORIS Hoberlandt, 1958

Signocoris kaszabi Hoberlandt, 1958

Signocoris kaszabi Hoberlandt, 1958, Ann. Hist. Nat. Mus. Nation Hung., n.s. IX, 50: 302. – Kormilev, 1964, Quart, J. Taiwan Mus. 17: 187.

Material examined: 1 d, INDIA, Madura, Jos. Dubreuil.

This curious apterous species is known only from Madura, India.

Subfamily MEZIRINAE

Genus PARAPICTINUS Kormilev, 1956

Parapictinus ovatus Kormilev

Parapictinus ovatus Kormilev, 1956, Philipp. J. Sci. 85: 293.

Material examined: 1 9, INDIA, Shembagamur.

In my description, I mistakenly indicated that this species was apterous, but it is brachypterous.

¹Research Associate in Entomology at the B. P. Bishop Museum, Honolulu, Hawaii 96818, U.S.A.

Genus NEUROCTENUS Fieber, 1861

Neuroctenus taiwanicus Kormilev

Neuroctenus taiwanicus Kormilev, 1955, Mushi 28: 39.

Material examined: 1 &, SOUTH CHINA, Thon Od, 10.I.1960, in the nest of Nasutitermes, Hrdý.

So far, only 1 species of Aradidae has been found in the nests of termites: Aspisocoris termitophilus Kormilev, 1967 from West Australia. In the small lot reported in the present paper are 2 species with the label "In nest of Nasutitermes": Neuroctenus taiwanicus Kormilev and 1 new Mezira species, described later in this paper as Mezira termitophila, n. sp.

Neuroctenus taiwanicus Kormilev was originally described from Taiwan, but later was also recorded from Hainan. On both islands it is rather common.

Genus MEZIRA Amyot & Serville, 1843

Mezira termitophila Kormilev, n. sp. FIG. 1-2

d: Elongate ovate, with subparallel borders; head, pronotum, scutellum, corium and hypopygium finely granulate; connexivum finely punctured. Connexivum concolorous. Body without pilosity. Head almost as long as its width across eyes (23:24); anterior process with parallel sides, tricuspidate anteriorly, reaching 3/4 of antennal segment I; antenniferous tubercles short, acute, divaricating. Eyes semiglobose, protruding. Postocular tubercles minute, not reaching outer border of eyes; vertex with 2 (1+1) parallel rows of granules; infraocular carinae very low, perceptible only behind eyes. Antennae moderately stout, relative lengths of antennal segments I to IV: 11.5:8:11.5:11. Labium reaching hind border of labial groove, which is closed posteriorly. Pronotum almost 1/2 as long as its maximum width (26:54); collar very thin, slightly sinuate anteriorly. Anterolateral angles narrowly emarginate and evenly rounded, not reaching fore border of collar. Lateral notch barely perceptible, lateral borders parallel at humeri, strongly converging anteriorly and almost straight there. Hind border shallowly, evenly sinuate. Fore disc with 4 (2+2) moderately large ridges and a deep median sulcus between inner ridges. Hind disc finely granulate. Scutellum with all borders carinate, shorter than its basal width (25:30); lateral borders sinuate before tip, the latter is rounded; median ridge narrow, granulate; disc also granulate, raised along basal border. Hemelytra long, reaching beyond hind border of tergum VII; basolateral borders of corium parallel and thinly carinate; apical angle of corium acute, apical border truncate exteriorly, slightly sinuate interiorly, forming an obtuse angle. Disc scabrous and sparsely graunlate. Abdomen longer than its maximum width across segment V (76:59); with parallel sides from segment II to V, then evenly rounded; PE-angles (postero-exterior) of connexiva II to VI not protruding, PE-VII rounded. Tergum VII slightly raised posteriorly. Paratergites short, stout, clavate, reaching 1/2 of a short, wide, rounded-posteriorly hypopygium (11:24). Median ridge of hypopygium short, stout, almost circular, extending from basal 1/3 to tip of disc. All spiracles ventral and not visible from above. Legs unarmed. Color: black to dark brown; clypeus, bases of antennal segments I to III, and apical 1/2 of IV, borders of pronotum and narrow strip on exterior border of connexiva reddish brown to yellow-brown; tips of femora, tibiae and tarsi yellow-brown; labium yellow. Total length, 6.24 mm; width of pronotum, 2.16 mm; width of abdomen, 2.36 mm.

Holotype &, SOUTH CHINA, Sin Lun, 23.I.1960, in nest of *Nasutitermes*, Hrdý. Deposited in the Štys collection, Praha, Czechoslovakia.

M. termitophila, n. sp. belongs to Mezira s. str. It is related to M. plana Hsiao, 1964, but is much smaller; the antennae are much shorter than the head and pronotum together; the postocular tubercles do not reach the outer borders of the eyes, and the anterolateral angles of the pronotum do not reach the fore border of the collar.

Mezira stysi Kormilev, n. sp. FIG. 3-4

d: Elongate ovate; head, pronotum, scutellum, corium and hypopygium finely granulate; connexivum finely punctured. Connexivum bicolorous. Body partially covered with short, curled, yellow hairs. Head almost as long as its width across eyes (29:30); anterior process long, constricted laterally, rounded and incised apically, reaching beyond tip of antennal segment I. Antenniferous tubercles acute, slightly

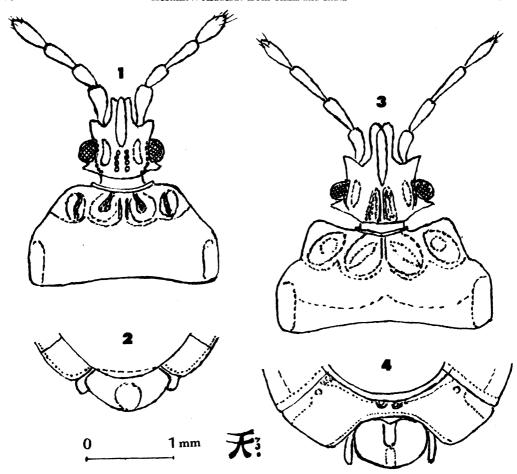


FIG. 1-4. (1) Mezira termitophila, n. sp., δ , head and pronotum. (2) same, tip of abdomen from above. (3) Mezira stysi, n. sp., δ , head and pronotum. (4) same, tip of abdomen from above.

divaricating, reaching basal 1/4 of antennal segment I. Eyes subconical, protruding. Postocular tubercles minute, acute, reaching, or almost reaching, outer borders of eyes. Vertex raised and granulate; infraocular carinae high. Antennae thin; relative lengths of antennal segments I to IV: 10:12:14:12.5. Labium reaching fore border of prosternum, labial groove open posteriorly. Pronotum much shorter than its maximum width (23:63); fore lobe narrower than hind lobe (46:63). Collar very thin, angularly incised anteriorly. Anterolateral angles slightly expanded, rounded and produced forward as far as collar. Interlobal notch sinuate; lateral borders of hind lobe slightly rounded. Hind border slightly sinuate medially and sublaterally. Fore disc with 4 (2+2) high, granulate ridges; interlobal depression deep; hind disc finely granulate. Scutellum shorter than its basal width (28:40); lateral borders carinate, convex at base, sinuate subapically: tip incised. Basolateral angles with tubercles covered with yellow, curled hairs. Median ridge stout at base, tapering toward tip and with 2 crossbars, at 1/3 and 2/3 of its length. Disc granulate. Hemelytra reaching 1/2 of tergum VII. Basolateral borders of corium straight, crenulate and slightly reflexed; apical angle rounded, apical border subtruncate exteriorly and deeply sinuate interiorly, forming almost a right angle; disc of corium granulate. Abdomen ovate, longer than its maximum width across segment V (84:76); PE-angles of connexiva II to VI barely protruding; PE-VII rectangular with rounded tip. Discs of connexiva raised at postero-interior angles, less so at postero-exterior angles. Tergum VII raised posteriorly with a curved, subapical, transverse ridge, with 2 (1+1) tubercles submedially. Paratergites thin, crescent-shaped, reaching 7/8 of a globose hypopygium; latter with a thin median ridge extending from base to 3/5 of disc; and a reddish brown glabrous strip just behind the median ridge. Spiracles II to VIII ventral and not visible from above. Legs unarmed. Color: piceous; clypeus, bases of antennal segments, anterolateral borders of pronotum and 4 ridges of its fore lobe, hind borders of connexiva II to VII, round dot in the middle of fore borders of connexiva III to VI, and exterior 1/2 of fore border of connexivum VII yellow to yellow-brown. Membrane gray-brown with piceous spots. Total length, 6.92 mm; width of pronotum, 2.52 mm; width of abdomen, 3.04 mm.

Holotype &, SOUTH CHINA, Su-chow, 21–22.XI.1959, Hrdý. Deposited in the Štys collection, Praha, Czechoslovakia.

It is a pleasure to dedicate this species to Dr Pavel Štys, Karlovy University, Praha, CSR, who gave me the opportunity to study this lot.

Mezira stysi, n. sp. belongs to Mezira s. str. and is related to M. luteomaculata Kormilev, 1957, from which it may be separated by the globose hypopygium (cordate in M. luteomaculata).

LITERATURE CITED

Hsiao, Tsai-yu. 1964. Results of the Zoologico-Botanical Expedition to South-West China, 1955-1957, Hemiptera: Aradidae. Acta Ent. Sin. 13: 587-605.

Kormilev, N. A. 1957. Notes on Aradidae from the Eastern Hemisphere. XIV. (Hemiptera), Aradidae from the Oriental and Australian Regions. IX. Ann. Mag. Nat. Hist., ser. 12, 10: 265-73.

1967. Aradidae in the South Australian Museum, Adelaide. II (Hemiptera-Heteroptera). Rec. S. Austral. Mus. 15: 513-50.