

NEW SPECIES AND RECORDS OF THE GENUS TRICHOCANACE WIRTH (Diptera, Canaceidae)

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Abstract: A key is presented to the genus *Trichocanace*, and 2 new species are described; *atra* from Queensland, the Philippines, and Thailand, and *marksae* from Queensland. New distribution is recorded for the third known species, *sinensis* Wirth, from Madagascar, Malaya, Thailand, and Queensland.

In 1951 I proposed the genus *Trichocanace* (Occ. Papers B. P. Bishop Mus. 20: 252) for a single species, *sinensis* Wirth, from Foochow, China. Since that time, the accumulation of extensive new material has brought to light the existence of 2 additional species, which are here described, and has added to the known distribution of *sinensis*. A key is also presented by which these may be separated. Holotypes are in the U. S. National Museum in Washington, D. C., paratypes and other specimens will be deposited in the Academy of Natural Sciences of Philadelphia; Australian Museum, Sydney; Bishop Museum, Honolulu; British Museum (Nat. Hist.), London; and Australian National Insect Collection, C.S. I.R.O., Canberra.

The new records of *sinensis* have extended the range of what was considered an Oriental species, to the Ethiopian and Australian Regions. One of the new species ranges through the Oriental Region into N. Queensland, but the other so far is known only from Queensland. Thus the genus seems to be confined to the Old World tropics, where it is apparently restricted to intertidal saline habitats.

KEY TO THE SPECIES OF TRICHOCANACE

1. Large black species with heavy pearl-gray pollen, dorsum of thorax subshining; frons dull black laterally with broad median pearl-gray pollinose band and gray pollinose hind margin; both sexes with conspicuous anteroventral and posteroventral combs, each with 6-10 strong black spines, on distal 1/2 of fore femur..... **atra**
Dull gray species with yellow tarsi; frons not black vittate; fore femur with only anteroventral comb, or combs absent 2
2. Large species, wing 3.5 mm long; fore femur without combs..... **sinensis**
Small species, wing 2.4 mm long; fore femur with inconspicuous anteroventral comb of 6-8 brownish, slender, sharp spines on distal 1/2..... **marksae**

Trichocanace sinensis Wirth

Trichocanace sinensis W., 1951, Occ. Papers B. P. Bishop Mus. 20: 253 (♂; Foochow, Chi-

na; fig. head, wing, ♂ genitalia).

DISTRIBUTION: China, Madagascar, Malaya, Queensland, Thailand.

NEW RECORDS. MADAGASCAR: 1 ♀, Madagascar Sud-Ouest, Saint-Augustin 6 m, Tuléar Dist., 11-13. II. 1958, B. Stuckenberg. MALAYA: 5 ♂♂, 2 ♀♀, Negri Sembilan, Port Dickson, Telok Pelandok, light trap, 18. VII. 1958, R. Traub. QUEENSLAND: 2 ♂♂, 3 ♀♀, Cairns, bay shore, 19-25. IV. 1957, Wirth. THAILAND: 1 ♂, Bangkok, Pratomvan, light trap, VIII-IX. 1962, J. Scanlon.

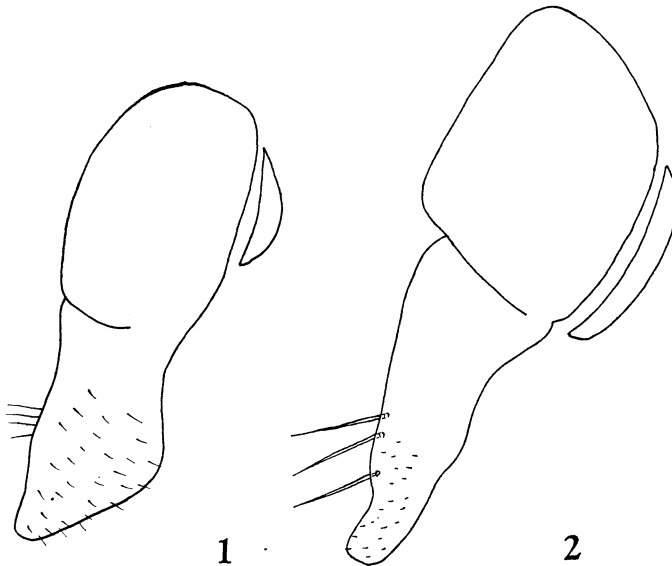
The original description should be corrected to state that on the mesopleuron bristles are present but they are fine and yellow in color; in some specimens the upper bristle is black. The fore femur bears an anteroventral row of slightly flattened, long, whitish hairs in place of a spinose armature. Female abdomen with ovipositor arising low down on last segment as a pair of very slender curving blades, brown and pubescent on proximal 1/2, black and spine-like distally, each with 2 hair-like black bristles arising from brown portion and extending nearly to apex of black portion, 1 ventrally and 1 dorsally.

Trichocanace marksae Wirth, n. sp. Fig. 1.

♂, ♀: Length, about 2.5 mm; wing 2.4 mm.

A small, dull-grayish species, dorsum of body brownish; tarsi yellowish toward bases, wings grayish brown, the veins brownish; halteres and palpi yellowish white.

Chaetotaxy as in *sinensis*; frons and mesonotum usually with moderately numerous brownish setulae, but in some specimens these become very fine and pale; pleura, legs, and abdomen with dense, short, very fine, whitish, pilose hairs; disc of scutellum with longer, but sparser, yellowish hairs. Fore femur on distal 1/2 in both sexes with an inconspicuous anteroventral comb of 6-8 sharp, slender, brownish spines. Ventral lobe of ♂ tergum 9



Figs. 1-2. Lateral view of tergum 9 of *Trichocanace* spp.: 1, *marksae* n. sp.; 2, *atra* n. sp.

(fig. 1) broad with blunt anteroventral point.

DISTRIBUTION: Queensland.

QUEENSLAND: Holotype ♂, allotype ♀, Cairns, bay shore, 25. IV. 1957, Wirth (Type No. 67134, USNM). Paratypes: 8♂♂, 13♀♀, same data as type; 1♂, 1♀, tidal mud flat, Cairns, 6. V. 1958, D. K. McAlpine (Australian Mus.).

Dedicated to Dr. Elizabeth N. Marks of the University of Queensland, in recognition of her great contribution to Australian dipterology, and especially because of her keen interest in intertidal flies. *T. marksae* can be separated from the other 2 known species by its small size, dull grayish color, and femoral armature.

Trichocanace atra Wirth, n. sp. Fig. 2.

♂, ♀: Length, about 3.3 mm; wing 3.0 mm.

A large, brownish black species with markings of black and pearl-gray pollen. Frons broadly velvety black laterally caudad to level of posterior ocelli, vertex and a median frontal vitta pearl to bluish white pollinose; face, cheeks, occiput, and antennae blackish to gray pollinose, depending on angle of light and vision. Mesonotum and scutellum subshining brownish black with more or less grayish pollen; dorsum of abdomen densely grayish-white pollinose. Pleura and legs blackish with sparse gray pollen; tarsi dark brown. Wings dark grayish brown, including veins; halteres yellowish; squamae whitish.

Chaetotaxy as in *sinensis*, the bristles slightly weaker, except for the notopleural which is very stout and spine-like; mesofrons with a few weak, black setae; mesonotum and scutellum with numerous, erect, short, black, setulose hairs on disc; hairs on pleura, abdomen and legs not as long as in *sinensis*, and mostly brownish, but mixed with some yellow ones. Femora of both sexes with characteristic armature: Fore femur on distal 1/2 with both an anteroventral row and posteroventral row of 6–10 strong, black spines; mid and hind femora each with 3–4 strong, black anteroventral spines on distal 1/3. Male genitalia (fig. 2) with lobe of tergum 9 long and digitiform, not appreciably bent, and bearing 3–4 long, yellowish spines on anteromesal margin.

DISTRIBUTION: Queensland, Philippines, Thailand.

QUEENSLAND: Holotype ♂, 1♂ paratype, Cairns, 19. IV. 1957, Wirth (Type No. 67135, USNM); allotype ♀, 20 km SE Bowen, 6. V. 1955, Norris & Common (ANIC, Canberra). PHILIPPINES: 1♀ paratype, Zamboanga, Mindanao, X. 1945, at light, J. Laffoon. THAILAND: 20♂♂, 10♀♀, paratypes, Bangphra, Cholburi, light trap, X. 1962, J. E. Scanlon.

The black and gray color pattern and strong armature of the legs serve to distinguish this species.