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Description of New Mosquito Tripteroides

(Tripteroides) szechwanensis sp. new.

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Adult

Female: Female body length 4.65 mm., body dark brown. Head: Vertex and occiput with light green flat scales, lower lateral part with white flat scales. A narrow border of white scales along eye margins, a pair of yellow setae on the middle of the front vertex. Antenna: Scape round and yellow, rest of the segments are black, each flagellar segment bears 8-9 long hairs, the length of the hairs are gradually shorter from the basal part to the end part. The 2nd and 3rd segment from the last one are the same length; but the last one is longer, almost 1.56 times as long as the 2nd to the last one, with short hairs. Labial palpi $1/6$ as long as proboscis, dark brown with narrow long scales. Proboscis dark brown, with long narrow scales, 1.35 times as long as front leg, also longer than abdomen. Distal margin of clypeus is round, light yellow color, covered with white flat scales. Eye black.

Thorax: Scutum covered with gray green narrow scales, formed in a median longitudinal row. On both lateral sides the scales point toward outside. Front margin of scutum has one row of pale gray scales, no central bristles. Scutellum has green gray scales, 1-3 black long bristles in the center of posterior end, 3-4 black long bristles on the both sides. Postnotum black, no scales. Anterior pronotum has yellowish brown flat scales and 3 bristles. Posterior pronotum has pale gray broad scales, light green with reflection, 1 bristle. Propleuron has pale gray broad scales, 3 bristles. Spiracular bristles 2-4. Upper part of sternopleuron

and mesepimeron with pale gray flat scales, pale green with reflection; lower part black, no scales or bristles. Prelar bristles 2-4. Wing: Length about 2.9 mm., costa and 1st longitudinal vein are darker than rest of veins. The length of stem vein 2 is a little shorter than anterior fork cell, also stem vein 4 is shorter than posterior cell. Cross veins 3-4 and 4-5 parallel, 3-4 cross vein is closer to the wing base than cross vein 4-5. Black narrow scales on the veins. Basal part of halter is yellowish brown, terminal knob dark brown. Legs: Legs are gray-green, inner side of femora pale white, hind tibia is 0.846 as long as middle tibia, 5th tarsus shorter than front and middle tarsus. First hind tarsus is longer than tibia.

Abdomen: Tergites have gray-green flat scales, dark brown with reflection. Lateral and posterior of 1st tergite with short hairs. Sternites covered with pale gray broad scales, a few short hairs on the posterior margin of each sternite.

Male: Male body length 4.51 mm., body dark brown. Palpi $1/7$ length of proboscis, also the length of proboscis is 1.27 times as long as front leg. Antenna: The 2nd to last segment is longest, almost 2.4 times as long as 3rd to last segment; last segment is short, only 0.75 as long as 2nd, with short hairs. Wing: Length about 2.73 mm.. Legs: Front leg; 5th tarsus is longer than 4th tarsus, a pair of different sized claws on the end of 5th tarsus. The large claw with one stout spine in proportion to length of small claw is $2/3$. Middle leg; 5th tarsus is shorter than 4th, claws are same as the front. Hind leg; tibia is 0.81 as long as middle tibia, 1st tarsus is longer than tibia, two same size claws on the end of 5th tarsus.

Terminalia: Basistyle cylindrical shape, (Fig. 1) bears 20 long setae on the outer side, the inner and ventral hairs are short, narrow scales

on the lateral and ventral area, subapical has 10 long setae on the upper part and 20 short on the lower part. Dististyle narrow and longer, about 1.19 times as long as basistyle, claw of dististyle very short and curved. Phallosome triangle shape. Lobes of ninth tergite longer than wide, each bears 4-6 stout spines, oval shape between 2 lobes (Fig. 2). Tenth sternite rather short, crowned with spines in various lengths, 4 small hairs near other end (Fig. 3).

Larva

Larva: Head nearly as long as it is broad. Antenna short, stout and smooth, gradually smaller at both ends, at 5/6 of antenna, near basal part, has one hair, on the outside of the end of the antenna has two long spines, inner side has one spine, two short spines in the middle area; one end of the spine is stout, the other is flat shape. Hairs of labrum are strong and a little curved. Head: hair A, one with 8-10 branches, stellate; hair B, only one; hair C, one with 2-4 branches; hair D, one with 3-4 branches. Mouthbrush well developed in the central part, inner hairs sharply curved, form hook shape. Mentum convex under central teeth gradually narrow at both ends, posteriorly curved, usually with one big central tooth (occasionally has 2), 8-10 small teeth on both sides (Fig. 4).

Thorax and abdomen have many stellate hair; each hair has 14-19 branches, each branch has small spines, gradually smaller on the distal end, mostly have two points, occasionally have 3 points. Prothoracichairs: (1) 15 branches, stellate; (2) single; (3) 10 branches (Fig. 5). Lateral of prothoracic hairs, located from an oblong sclerotized area, the longest one, no branch; next longest one 3 branches; shorter one, 6 branches, all branches with small spines, only the shortest one, two branches, no spine (Fig. 6).

Dorsal lateral mesothorax with one strong spine, the end with 2-3 sharp points. Lateral of mesothoracic hairs: one, 3 branches; one with 6 branches; one single; all branches with small spines, the shortest one, two branches, no spine (Fig. 7). Metathorax: a very strong bifid spine, arising from the heavily sclerotized area, which has two branches, one is twice as long as the other one, both ends sharp, also has spines on the branches. Lateral hairs grow from an oblong sclerotized area, one with seven branches; one single, one short and slender; all branches with spines, the shortest one has two branches, no spine (Fig. 8). Anal comb has 7-11 teeth (Fig. 9). Siphon: A dark band at the basal area, length 0.8-0.85 mm., 1.9-2.5 times the length of diameter at base, the middle area of siphon is dark color. Posterior margin of siphon has two rows of 6-7 bifid branches hairs, except the basal pair which always has 3-4 branches, anterior margin has 2 bifid hairs. Pecten 7-10. Dorsal and lateral of anal segment covered by saddle, 10-12 sharp long spines on the posterior margin, lateral spines gradually shorter or larger and small alternated. Outer dorsal brush single, longer than inner one, inner brush 4-5 branches, same length, with spines. One pair ventral brushes, with 4-5 short branches.

Holotype: Adults bred from larva (No. 001698) collected from bamboo stump on June 16, 1954 in Chengtu, Szechwan. Larva (No. 00309) collected from the same place ~~and same place~~ and same time as adults, slide No. 54.5.

Paratype: Adults hatched out from larvae collections No. 00125, No. 00182, No. 00207, No. 00435 and No. 003039, collected from same locality on June 22, 1953, July 4, 1953, July 10, 1953, August 26, 1953 and August 4, 1964 respectively. / Larva: August 4, 1954 (No. 00309), slides numbers 54.1, 54.2, 54.3, 54.4, 54.6, 54.7.

Habit: The author has discovered mosquitoes, larvae 27 times in the bamboo stumps, with one exception, which was found from the shallow swamp, occur mostly from June to September.

Discussion

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Tripteroides has four subgenera: (Edwards 1932), Maorigoeldia, Rachisoura, Mimeteomyia and Tripteroides. In the first two subgenera, their wing scales are wide and dense, palpi of both sexes short, 3-4 bristles on the posterior pronotum, male palpi of Rachisoura is $\frac{2}{3}$ as long as proboscis, one bristle on the posterior pronotum. In the last 2 subgenera, their wing scales narrow, one bristle on the posterior pronotum. In Mimeteomyia, the length of male antenna is just as long as proboscis, sometimes is shorter. Tripteroides; palpi of both sexes are short, always $\frac{1}{6}$ as long as proboscis, proboscis slender, longer than abdomen, no scales on metanotum. In Trepteroides there are two groups, differences in femora spot present. This new species belongs to Aranoides, without spot, according to Edwards' report (1932), eight species have been described. Each has distinguished characteristics which differ from the new one: T. (T.) affinis; eye margin blue, scales of posterior pronotum brown; T. (T.) argenteiventris has dark brown or black head, white flat scales on the anterior pronotum, blue metallic scales on mesonotum, arranged un-uniformly, ninth tergite has 8 spines; T. (T.) edwardsi, white scales on the lateral scotum and scutellum also along wing base, one bundle of hairs on metanotum; T. (T.) microcala, anterior pronotum with pale gray scales; T. (T.) nepenthicola, humeral, middle and posterior cross veins are parallel, basal part of femur brown, end black, two claws on proleg, one claw is twice as long as the other one; T. (T.) nepenthis, basal part of labium without scales, hind tarsus one claw; T. (T.) ornata, head black, no scales on eye margin, brown broad scales

on posterior pronotum; *T. (T.) aranoides* var. *serrata*, pale and tooth-shape scales between tergites and sternites of abdomen.

Only one species discovered in China, which was distributed in Hinan, Kwangshi, Yunan. This new species is closely related to *Tripteroides aranoides* but adults differ in the following characteristics: (1) a narrow border of blue scales along eye-margins, (2) palpi about 1/6 the length of proboscis, (3) white scales on anterior pronotum, (4) style shorter than coxite, (5) lobe of ninth tergite carrying 3-5 strong bristles, median emargination triangular in shape.

The larva differ from *Tripteroides aranoides*: (1) frontal hair A 2 branches, (2) mentum concave under central tooth, (3) stellate hair about 12 branches, (4) comb with 10-12 teeth, large and small ones alternate, (5) length of siphon 0.5-0.7 mm., 2.5-3.0 times length of width at base, and (6) outer caudal hair smooth.