A new *Pterallastes* species from China

(Diptera: Syrphidae)

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Since my revision of the genus *Pterallastes* (Thompson, 1974) a single new species has been discovered. This species is described here to make the name available for the forthcoming Guide and Catalog of Palaearctic Syrphidae (Thompson and Pedersen, in press). The characters of this new species verify the previously proposed phylogeny of the genus.

Pterallastes bettyae, new species

Male. Head: orange except black vertex and occiput; face golden pollinose, with tubercle low and indistinct as in *thoracicus* Loew; cheek shiny on anterior half, yellowish gold pollinose and white pilose on posterior half; frontal lunule orange; frontal triangle slivery pollinose; vertical triangle silvery pollinose except brownish pollinose ocellar triangle, yellow pilose; occiput silvery white pollinose and pilose on lower half, becoming yellow on upper half. Antenna orange, black pilose; third segment small, about as large as metathoracic spiracle; arista orange, with tip slightly brownish.

Thorax. Black; dorsum brownish-yellow pollinose medially, yellow pollinose laterally, tawny pilose, with pile short except for long bristlelike hairs above wings and on postalar callus; scutellum dull black except sparsely silvery pollinose on apical margin, tawny pilose, with white ventral fringe; pleura silvery pollinose, yellowish to white pilose; squama white with orange fringe and margin; plumula white. Wings: with a slight brownish tinge, microtrichose except bare narrowly behind anal vein and in front of auxilliary vein; third vein (R_{4+5}) with a deep loop in apical cell, slightly deeper than in *bomboides* Thompson. Legs: orange except brownish-black coxae and slight brownish tinge on front tarsus, shiny except pollinose coxae; coxae silvery pollinose, yellow pilose; hind coxa with a marginal row of black bristlelike hairs; pile mainly orange, black on anterior half of front tarsus, hind trochanter, ventral third of hind femur and anteromedial third of hind tibia, brownish black on anteroapical two-thirds of front tibia.

Abdomen: Dorsum appearing bluish black to naked eye, but appears as follows under strong light and through a microscope; first tergum dark reddish brown, sparsely white pollinose, white pilose with a few scattered black hairs medially; second tergum with large triangular lateral steel blue spots, with spots extending to medial one quarter and to basal and apical one eighth, rest of tergum dull black, white pilose except black pilose narrowly on apicolateral margin and expanding basomedially to basal one eighth of tergum; third tergum dark reddish brown, with basolateral corners steel blue, sparsely white pollinose on basal margin, dull black pollinose elsewhere, white pilose narrowly along basal and most of lateral margins, black pilose and with black pile narrowly reaching lateral margin at apex of tergum; fourth tergum similar to third except shiny reddish brown instead of dull black; genitalia shiny reddish brown, black pilose.

Male genitalia: surstylus triangular, slightly concave on apicoventral margin, with a slight ridge on inner face half way along ventral margin; left surstylus produced more ventrally; ninth sternum sparsely pilose ventrally with ventrolateral membranous areas

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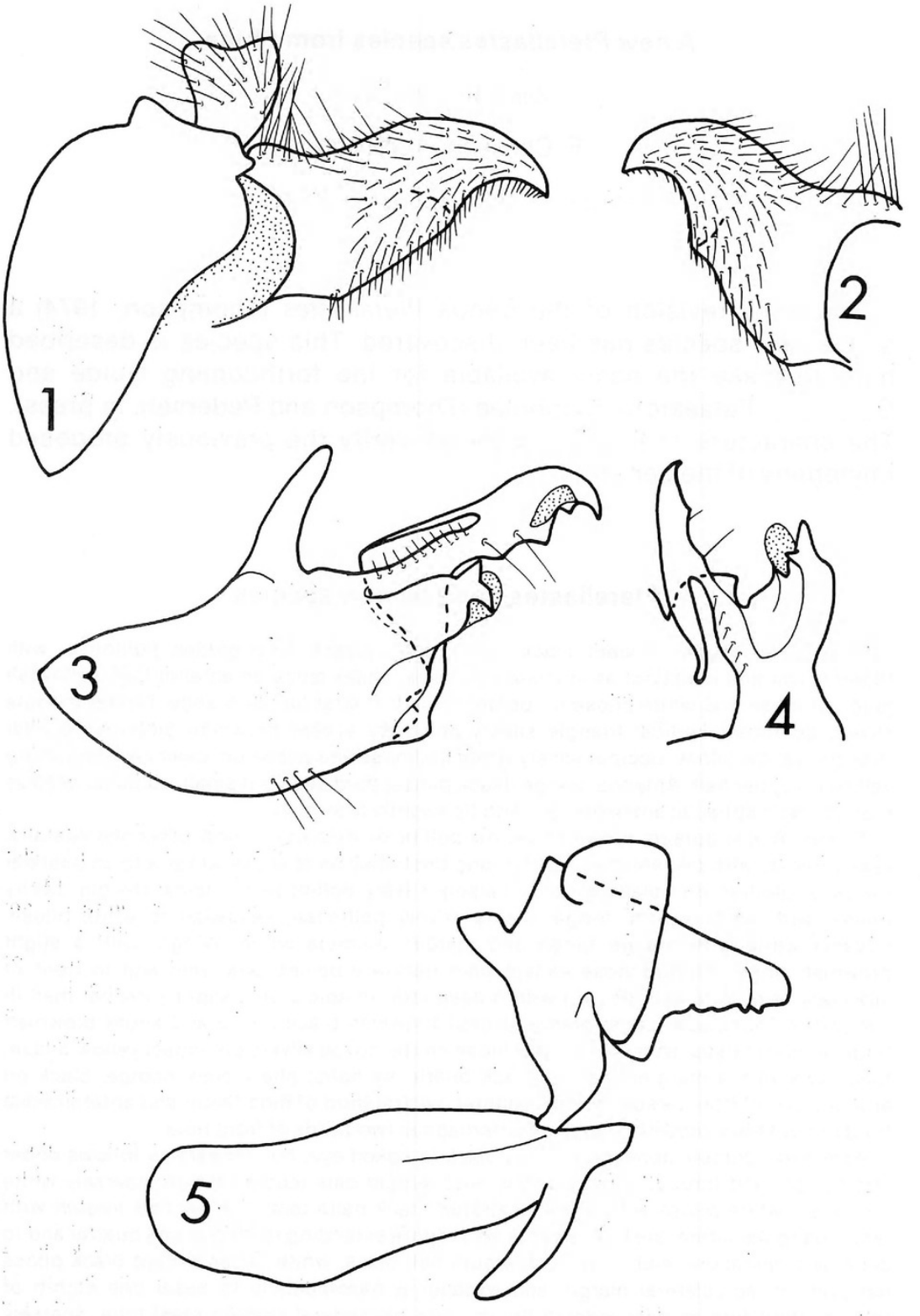

Figs. 1-5, *Pterallastes bettyae* Thompson, new species (holotype), male genitalia. Fig. 1. Ninth tergum and associated structures, lateral view; Fig. 2. Left surstylus, lateral view; Fig. 3. Ninth sternum and associated structures, lateral view; Fig. 4. Apical half of 9th sternum and associated structures, dorsal view; Fig. 5. Aedeagus and apodme, lateral view.

small and apicomedial to lateral processes, with lateral process bifid apically and directed dorsoapically; superior lobes pilose dorsobasally, produced into long slender apical prong with three small ventral teeth and a small apicolateral membranous area, with two long bristles on ventroapical margin; aedeagus with lateral lobe triangular, with apical process slender and strongly produced posteriorly and with ventral margin only slightly irregular; ejaculatory apodeme mushroom shaped; aedeagal apodeme stout, laterally expanded anteriorly so as to appear triangular in dorsal view, with a narrow posteroventral process.

Material examined: Holotype male, "CHINA, Kwanhsien, Jul '30"; paratype male, "CHINA, Kwan, 9 Aug '30"; both specimens from A.L. Melander collection and in the U.S. National Museum. See below for discussion of type locality.

Pterallastes bettyae is readily distinguished from all other *Pterallastes* species by its orange face, cheeks and legs. The sister-group of *bettyae* is *thoracicus* Loew; these species share a reduction of the ventral lobe of the surstyle, enlargement of the bifurcation of ventrolateral lobe on the 9th sternum and a shortening of the superior lobe (see Thompson, 1974, diagr. 1). It is my pleasure to name this pretty species after my wife.

The label localities, "Kwan" and "Kwanhsien", probably refer to the same area but that area could be one of three: "hsien" is a chinese word for a second order administrative division; "Kwan" is usually written as "Kuan"; and there are three "Kuanhsien" in China, one in Shantung Province (36°29′ N, 116°18′ E), another in Hopeh Province (39°27′ N, 116°18′ E), and the last in Szechuan Province (31°00′ N, 103°37′ E).

Literature Cited

Thompson, F.C. 1974. The genus *Pterallastes* Loew (Diptera: Syrphidae). J. New York Entomol. Soc. 82(1):15-29, 20 figs. 1 diagr., 1 map.

Thompson, F.C. and E. Torp Pedersen. In press. Flower flies (Diptera: Syrphidae) of the palaearctic region - a Guide and Catalog. Entomonograph, Kopehagen.