

XXXV RECORDS OF TRIGONALIDAE
FROM SOUTH INDIA

By T. V RAMAKRISHNA AYYAR, *First Asst. to the Government
Entomologist, Madras.*

The Trigonalidae form a very small family of parasitic Hymenoptera and very little is on record regarding these interesting insects. As far as is known of the few European and American forms, the members of the family appear to be parasites or hyperparasites on species of Vespidae. So far as I know there is only a solitary example of this group of insects that has till now been recorded from the Indian Continent, and that is *Pseudogonalos harmandi*, Schulz, collected in Darjiling before 1907. In the *Genera Insectorum* volume on this family the author Schulz records three others from Burma and none from any part of India except the one noted at Darjiling. As such the following records might be of some interest.

In 1917 two undoubted specimens of this family were collected from South India. But their presence as representatives of this rare group was found out only when I was recently sorting out our Hymenoptera collection. These two forms have certain general resemblances to the Burmese species described by Westwood in the *Transactions of the Entomological Society* for 1868, p. 327, under the name of *Poecilogonalos (Trigonalys) pulchella*, but both are different in certain features and as such are, I believe new forms. Their general features are as below :—

1. *Poecilogonalos fulvoscutellata*, n. sp.

Head large, subquadrate, distinctly broader than thorax, vertex and frontal region closely punctured. Eyes large and situated sufficiently apart from each other. Antennae long and filiform. Ocelli clear; clypeus slightly emarginate; mandibles large and each provided with three well-developed teeth.

Prothorax large, broader than long; punctured in the same way as head. The anterior lateral region is drawn out into a flattened raised structure in front of the wing tegulae. Scutellum prominent, more or less spherical and gibbous. Median segment convex with the punctures at the basal region running into fine longitudinal striae; there is a short tubercle at each lateral angle of the base of the metanotum. Legs well developed; two spurs on the hind tibiae.

The abdomen is ovoid in shape. The first segment is small and triangular, the second largest, the posterior segments smaller and

curved downwards, the second and third segments finely punctured.

General colour dark with brown and yellow markings.

Head. Ground colour dark; the mandibles except the teeth, one oval spot on each side of the clypeus, one small spot at base of each antenna, the inner and outer orbits of the eyes (the outer somewhat broadly), a minute spot in front of the anterior ocellus, and the lateral margins of the occiput yellow. Antennae ferruginous; the scape and distal end of the flagellum slightly darker. The face, front and occiput dark in colour but the latter has a V-shaped reddish-brown mark, the two limbs of the mark diverging towards the eyes on each side of the ocellar region. In addition there is also a fulvous red streak on each side of this V-mark, and there is a faint small reddish spot just behind and between the two posterior ocelli.

Thorax. Prothorax dark ferruginous, two somewhat conical spots at the base near the head one on each side of the mid-dorsal line, the anterior lateral flattened region, and one prominent mark on each pleura yellow. Scutellum completely fulvous yellow. Three transverse lines on the post-scutellum (all three in a line but not touching each other, the middle one being longer and broader), two large irregularly oval spots on median segment one on each side of the median line, one small spot at the mesopleural region under the wings, and two slightly larger spots at the meta-pleural region also yellow. The legs—coxae black with yellow mark, trochanters fulvous; femora, tibiae and tarsi reddish to ferruginous brown.

Abdomen. The abdomen is dark ferruginous brown. One small triangular spot on the first segment near its junction with the second, a transverse stripe on its ventral side, a broad transverse band at the distal region of the second segment and similar ones on the following segments yellow; those on the posterior segments are broadly interrupted at the median line. There is a tinge of reddish-brown on the second and third segments in front of the yellow band.

Wings fuscotransparent with a fuscous spot at the radial region. Tegulae yellowish.

Length 8 mm.

Pulney Hills, 3600 feet, Madura district. Collected by P. Susainathan; May 1917.

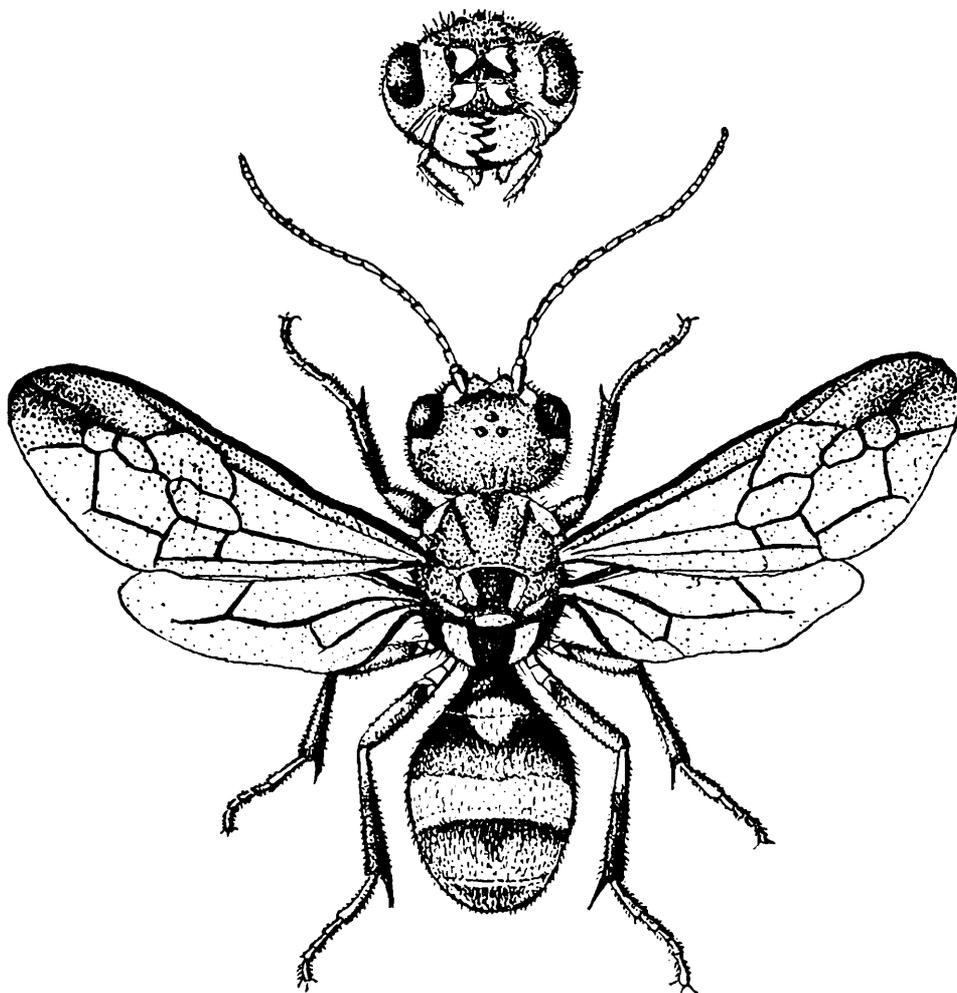
2. *Poecilogonalos kerala*, n. sp.

Though in some features this insect is similar to the above species from the Pulneys there are some marked differences which are as below.

It is quite different in general form and colour from *Poecilogonalos fulvoscutellata*. The head is very broad and appears shining and gibbous, although on closer examination it is found punctured very finely. The mandibles are prominent and show four big teeth. The dorsal grooves on the pronotum are some-

what more prominent. The tubercles in the median segment are less prominent. There are also colour differences. The general colour in this case is bright reddish-brown. The face and a narrow region of the front just above the antennae black; except the ocelli which are black the front and vertex are reddish-brown. The mandibles except the teeth, inner and outer orbits of eyes, one spot at the base of each antennae and a narrow portion along the posterior lateral region of occiput yellow; antennae reddish-brown.

Prothorax reddish-brown. One dark spot on the median line and one yellow spot on each side of the former, all three situ-



Poecilogonalos kerala, n. sp. × 6.

ated at the base close to the head. The anterior lateral flattened portion yellow. Scutellum black with a narrow yellow spot on each side of it. The three yellow lines on the post-scutellum and the other yellow marks more or less similar to the previous species. There is a reddish tinge predominant at the sides of the thorax in this species. Legs—coxae and trochanters brownish yellow, femora brown, tibiae ferruginous brown and slightly fulvous at the base, tarsi ferruginous.

Wings. Costal cell slightly narrower in this species. The second and third cubital cells shorter and broader than in the last species,

and the boundary veins of these and adjacent cells different in arrangement. Fuscus spot on wing clearer; tegulae ferruginous.

The face, cheeks, sides of thorax and abdomen clothed with more of whitish glistening pubescence.

Length 8 mm.

Santhanathode, Western Ghats, Malabar district. Collected by T. V. Ramakrishna Ayyar; 7-10-1917.

These insects are easily mistaken for small bees and likely to be overlooked. There is no doubt several other forms will be met with in South India in course of time, when it will be possible to get more information regarding this very little-known family of insects.
