Environment Conservation Journal 19 (1&2) 151-154 , 2018 ISSN 0972-3099 (Print) 2278-5124 (Online) Abstracted and Indexed



Description of two new species of Friona Cameron, 1902 from India

Chandra Satish¹ and Khandelwal V.K.²

Received: 15.09.2017

Revised: 10.11.2017

Accepted: 03.01.2018

Abstract

Genus *Friona*, established by Cameron in 1902 for the species *F. strillata* Cameron is recognised by strongly convex apical margin of clyptus and absence of median apical tooth. Two new species of the genus viz., *F. alyae* sp.nov. and *F. suramyi* sp.nov. are described from India alongwith the key for their identification.

Keywords: Mesoscutum black, Metascutellum smooth, intercepted, scutellum, middle coxa.

Introduction

The genus is easily recognised by having clypeus strongly convex its apical margin without median apical tooth or tubercle. Frons with longitudinally running irregular wrinkles, and also sometime with median vertical carina. Lower tooth of mandible (about 0.5) shorter than the upper tooth. Pronotal collar bordered behind by a carina. Epomia moderately strong to very strong; gradually approaching the other carina. Propodeum about 1.2x as long as wide, its basal carina complete; apical carina absent, or if present, blunt and very close to hind end of propodeum, carina often with blunt sublateral crests; spiracle of propodeum about 2x as long as wide. Propodeum behind basal carina polished, usually with long transverse wrinkles. Areolet in fore wing moderately large, about 1.4x as wide as high; second intercubitus reclivous. Nervellus intercepted near its lower 0.3-0.33. Mediella weakly to moderately arched. Brachiella reaching almost to wing margin (Cameron, 1902). First abdominal tergite without longitudinal carinae, tergite with a lateral tooth at base, spiracle near its apical 0.47. Ovipositor sheath about 0.8 to 1.0x as long as hind tibia, tip with a distinct nodus and distinct teeth.

Distribution : Oriental Region.

Key to the species of *Friona* : Mesoscutum black, without any marking. Lateral carina of scutellum not

Author's Address

¹Department of Zoology, B.S.A. College, Mathura ²Department of Zoology, K.R. (P.G.) College, Mathura **E-mail.:** *vinodkhandelwal1974@gmail.com* marked yellow. 8th abdominal tergite black. Hind tarsus brownish- yellow, except apex of its 4th and whole of 5th segment dark brown. *rufipes* carina of scutellum marked yellow. 8th abdominal Cameron. Mesoscutum variously marked with yellow. Lateral tergite with a yellow band. Hind tarsus with atleast 2-4 segments.

Mesoscutum with two marks on lateral lobe (1 semicircular mark infront and 1 along the notauli). Mesopleurum with a mark just above sternaulus close to the base of middle coxa. Apical band on 6th tergite broadly interrupted in middle, and bands on 7th and 8th tergites interrupted at two places. *adyae* sp.nov (Gupta, 1987).

Mesoscutum with two marks on middle lobe along the notauli. Mosopleurum near the base of middle coxa with 2 marks one above the sternaulus and one below the sternaulus. Apical bands on 6th and 7th targites interrupted at two places and band on 8th tergite complete and not interrupted *suramyi* sp. nov. *Friona adyae* sp. nov. (Pl. I, Figs. 1-3)

Female: Face moderately strongly wrinkled. Clypeus shiny, densely punctate at base, sparsely and shallowly punctate towards apex. Malar space granulose, 0.4x the basal width of mandible. Frons strongly wrinkled, wrinkles radiating from the base of median ocellus and also with a median longitudinal carina. Vertex and temple with sparse, minute weak punctures. Pronotum largely transstriate, upper shoulder densely punctate, epomia strong. Mesoscutum sparsely minutely punctate,

Copyright by ASEA

All rights of reproduction in any form reserved



Chandra and Khandelwal

subpolished. Scutellum shiny with a few scattered punctures, its lateral carina extending 0.4x its length. Metascutellum smooth and shiny. Mesopleurum closely trans-wrinkled, towards base tending to be reticulate, juxtacoxal carina not well defined. Propodeum shiny, between basal carina and apex trans-striate, apophyses moderately high



(Pl. I, Figs. 1-3) Fig.1 Dorsal view of propodeum and abdomen Fig.2 Dorsal view of mesoscutum and scutellum Fig.3 Mesopleurum.

crest-like, basad of basal carina smooth and shiny with a few scattered punctures, spiracle longish and nervellus intercepted at its lower 0.33. First abdominal tergite largely smooth and subpolished, second and third granulose with setiferous punctures. Ovipositor tip lenseolate, 0.8x as long as hind tibia (Dutt, 1923). Black. 5-9 antennal flagellum segments white. The following are yellow: Face and clypeus almost, except for a median inverted Y-shaped black mark, mandible, except the teeth, malar space, frons and vertex along the eye margin, pronotal collar and upper shoulder narrowly, lateral lobes of mesoscutum with thin semicircular marks in front and thin lines along the notauli towards base, tegula, subtegular ridge, mesopleurum with a triangular faint mark near the base of middle coxa, scutellum, lateral carina of scutellum, metascutellum, area at the base

of hind wing, metapleurum with an elongated mark along pleural carina, propodeum with usual inverted Y-shaped mark, base of first tergite, apices of all the abdominal tergites, except band on 6th broadly interrupted in center, bands on 7th and 8th sublaterally interrupted. Legs in general dark of yellow with brownish hue, except apical segments fore and middle tarsi brown; hind tarsus white, except basal 0.4 of its first and fifth segment wholly brown to dark brown. Wings clear hyaline.

Male: Not known.

Length: Female, 11 mm; fore wing 8-5 mm; ovipositor sheath 3.5 mm.

Material examined: Holotype one female, India: Uttar Pradesh, Bareilly, 27.xii.2013, Adya; Paratypes, 17 females, same data as that of Holotype.

Distribution: India : Uttar Pradesh.

Remarks: This species is close to *F. rufipes* Cameron in having similar colour pattern of head, pronotum, metapleurum and propodeum.

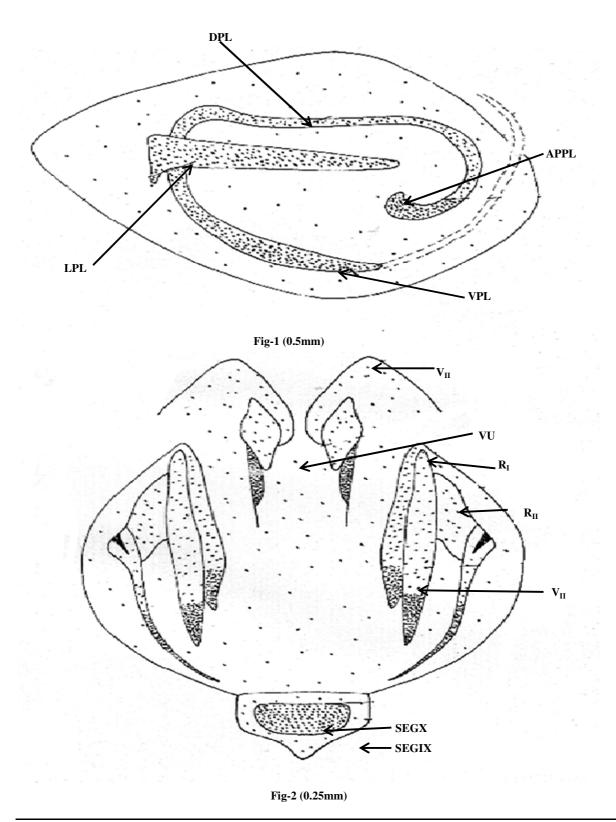
Etymology: The species is named after its collector. **Friona suramyi sp. nov.**

(**Pl. II, Figs. 1-3**)

Female: Face largely rugoso-punctate. Clypeus largely with a few scattered, shallow punctures, towards the apex smooth and shiny. Malar space granulose, 0.4x the basal width of mandible. Frons shiny, with a median longitudinal strong carina, and a few strong oblique striae extending from the base of median ocullus, at sides smooth and shiny. Vertex and temple smooth and shiny. Pronotum coarsely strongly trans-striate in the scrobe, its upper shoulder and area behind neck closely, shallowly punctate, epomia short. Mesoscutum shiny with sparse minute punctures. Scutellum sparsely and shallowly punctate, its lateral carina extending 0.33 its length. Metascutellum smooth and shiny Mesopleurum largely trans-striatowrinkled, specutum shiny with a few scattered minute punctures, prepectal carina extending 0.8x of mesopleurum. the height Metapleurum moderately strongly trans-wrinkled, juxtacoxal carina not well defined. Propodeum between basal and apical carinae with sparse and coarse striations, apical carina also somewhat complete, laterally forming crest-like apophyses, basad of basal carina shiny with a few scattered minute punctures, spiracle longish. Nervellus intercepted at its lower



Description of two new species of Friona Cameron



153 Environment Conservation Journal



Chandra and Khandelwal

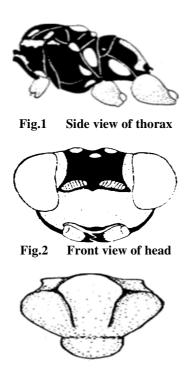


Fig.3 Dorsal view of thorax showing swollen shoulder. *Friona suramyi* sp. nov. (Pl. II, Figs. 1-3)

0.33. First abdominal tergite smooth and shiny, with a few minute punctures near spiracle, following tergites granulose, subpolished. Ovipositor long, its tip typical of genus, ovipositor sheath about 1.5x as long as hind tibia. Black Apical 0.3 of 5th antennal segment to 9th segment white above. The following are yellow : Face, clypeus (except apical margin narrowly at side and somewhat broadly in middle), mandible (except teeth), malar space, temple, frons and vertex along the eye margin, pronotal collar, this mark sometimes extensive and interrupted in middle, upper shoulder, this mark more extensive and joining pronotal collar mark above, middle lobe of mesoscutum along notauli, these marks sometimes very extensive, tegula, subtegular ridge, mesopleurum with two triangular marks near the base of middle coxa, one above the stemaulus and one below the stemaulus, scutellum, lateral carina of scutellum, metascutellum, metapleurum along the pleural carina, area near the base of hind wing, propodeum with an inverted Y-shaped mark, apices

of all the abdominal tergites, except sometimes base of first tergite also, and bands on 6th and 7th interrupted at two places sublaterally. Legs in general yellow to dark yellow, their fore and middle tarsi apically, middle tibia also in apical 0.25, dark brown. Hind leg with coxa reddish-brown with an oval yellow mark above, extreme apex of tibia, dark brown; colour of hind tarsus variable, dark brown, except 2-4 or 3-4 segments white. Wings clear hyaline (Towens, 1961).

Male: Not known.

Length: Female, 14-16 mm; fore wing 10-11 mm; ovipositor sheath 7-8 mm.

Material examined: Holotype one female, India: Uttar Pradesh, Pilibhit, 21.xi.2013, Suramya; Paratypes, 13 females, same data as that of Holotype.

Distribution: India, Uttara Pradesh.

Remarks: This species is close to F. *rufipes* Cameron and F. *adyae* sp. nov., but can be differentiated by the characters.

Etymology: The species is named after its collector.

Acknowledgment: The authors are thankful to Dr. Suman Kumar Principal B.S.A. College, Mathura for laboratory and library fascilities and to Dr. G.K. Srivastava Addl. Director, Z.S.I. Kolkatta for critical suggestions during the coruse of studies.

References

- Cameron, P., 1902. On the Hymenoptera collected by Mr. Shelford at Sarawak, and on the Hymenoptera of the Sarawak Museum. *J. Straits Br. Roy. Asiat. Soc. Singapore*, 37 : 29-140.
- Dutt, G.R., 1923. An annolated list of *Ichneumonidae* in the Pusa collection. *Mem. Dep. Agric. India* (Ent.Ser.). 8 (9) : 13-27.
- Gupta, V.K., 1987. The *Ichneumonidae* of the Indo-Australian Area (Hymenoptera). A synoptic catalogue of the taxa described through 1985 together with a bibliography, 1960-1985. (Part 1 and Part 2). *Mem. American Ent. Inst.*, 41(1) : 1-597 & 41(2): 598-1210.
- Townes, H., M. Townes and Gupta, V.K., 1961. A Catalogue and reclassification of the Indo-Australian *Ichueumonidae*. *Mem. Amer. Ent. Inst.*, 1: 1-522.

