

SUBFAMILY GELINAE

GENUS PARAPHYLAX FOERSTER, 1868

Paraphylax Foerster belongs to the subtribe Chiroticina, tribe Gelini of the subfamily Gelinae. Species of this genus parasitizes various small cocoons including that of other ichneumonids, and spider eggs. Several species also parasitizes Psychidae. This is large genus recorded mostly from Old World tropics, but few species from Japan and India.

Townes, Townes and Gupta (1961) included 14 species under Paraphylax from Indo-Australian region. Later, Townes (1969b) gave generic diagnosis, key, distribution etc. for this genus. One more species is added with key to the Indo-Australian species of this genus by Heble (1981, unpublished) from Marathwada region of Maharashtra, India. This genus is recorded here for the first time from Western Maharashtra, and a new species P. psychitus is described on the material collected from Sangli. Few of them have been reared from Psychidae.

Paraphylax psychitus sp. nov. (Fig. 8 a-c)

♀ : 8 mm. Head (Fig. 8b) 0.80 times as long as broad, in profile 2 times as long as high; vertex shiny, closely, very finely punctate; ocellar triangle

sparsely, finely punctate; lateral ocelli separated from eyes by 1.60 times their diameter; frons as long as broad with median vertical carina, striatopunctate above and finely, sparsely punctate below; antenna 2 + 23 segmented; scape 1.85 times as long as broad; pedicel 2.40 times as long as broad; first flagellar segment 1.24 times the length of scape and pedicel combined, 5 times as long as broad; terminal flagellar segment 2 times as long as broad; face 0.52 times as long as broad, shiny, finely, sparsely punctate; clypeus separated from face by a groove, 0.40 times as long as broad, sparsely punctate medially, and striatopunctate laterally; mandible 1.33 times as long as broad, weakly striatopunctate, teeth equal, shiny basally; cheek as long as the basal width of mandible, finely, sparsely punctate at the base of mandible, and shiny above; temple weakly, transversely striate; occipital carina complete.

Thorax 1.80 times as long as broad; collar shiny, longitudinally weakly striate with very fine punctures; pronotum striate ventrally, striate to very weakly reticulate dorsally, hind corner shiny with very fine punctures; epomia absent; mesoscutum finely, closely punctate, median lobe striatopunctate posteriorly;

FIGURE 8. Paraphylax psychitus sp. nov., ♀

- a. Lateral view, entire,
- b. Propodeum, dorsal view,
- c. Second abdominal tergite.

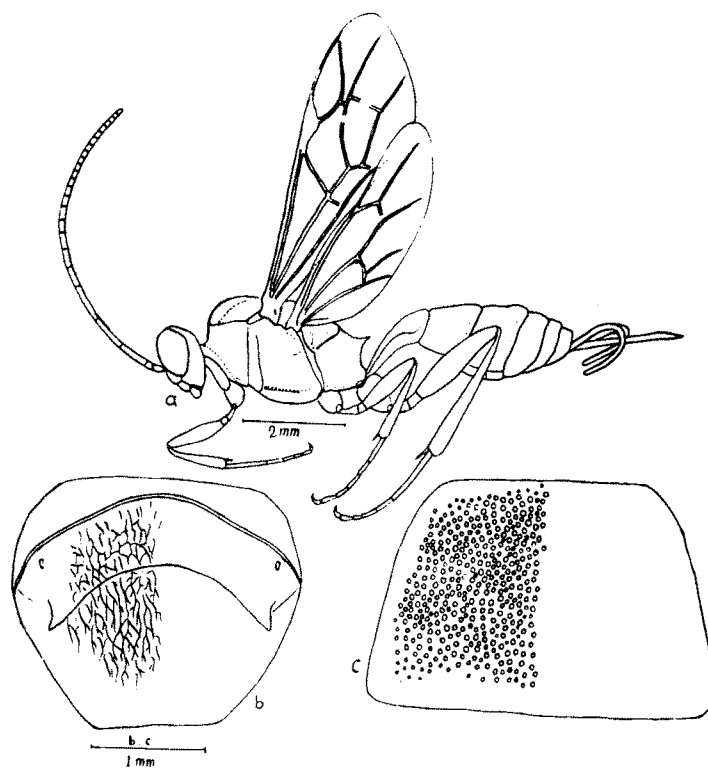


Fig. 8



notaulus slightly converging posteriorly and reaching beyond the centre of mesoscutum; scutellum shiny, convex, 0.75 times as long as broad, granulose; postscutellum shiny; propodeum with only basal transverse carina; areola absent; first lateral area finely, closely punctate; second and third lateral area confluent, shiny; areola and second lateral area confluent; first lateral and first pleural area confluent; second and third pleural area confluent, rugosopunctate; petiolar area very sparsely, finely punctate; propodeal spiracle 4 times as long as broad; propleurum finely, sparsely punctate; mesopleurum weakly reticulate dorsally, its lower hind part finely punctate; mesopleural fovea in the form of broad, isolated pit; sternaulus deep; prepectal carina reaching above the midheight of mesopleurum and away from front margin; prepectus broad, finely, sparsely punctate; postpectal carina weak; upper division of metapleurum shiny, granulose, its lower division weakly reticulate; juxtacoxal carina complete; legs moderate; first hind trochanter as long as second; hind tarsal claw 2.50 times as long as broad, moderately curved with hairs; hind basal tarsal segment 9.50 times as long as broad; tegula shiny. Forewing 4.60 mm. long, 1.47 mm. broad; stigma 4 times as long as broad; apical abscissa of radius 1.60 times its basal abscissa; areolet open;

second recurrent vein medially broadly fenestrate; basal abscissa of subdiscoideus 1.32 times as long as its apical abscissa; nervulus fenestrate at lower end, 0.67 times the length of postnervulus; second discoidal cell 2.42 times as long as broad; discocubital cell 2.90 times as long as broad; hind wing 3.06 mm. long, 0.74mm. broad with 1 + 5 hamuli; basal abscissa of radiella 0.35 times the length of its apical abscissa; intercubitella broadly fenestrate at lower end; basal abscissa of cubitella 2.50 times the length of its apical abscissa; superior and inferior nervellar abscissae in the ratio of 3:1 .

Abdomen 1.24 times the length of head and thorax combined; first tergite 1.34 times as long as its apical width, 1.18 times the length of second tergite, with dorsolateral carina reaching postpetiole; median dorsal carina absent; ventrolateral carina weak; postpetiole shiny with flanged dorsolateral corners; petiole sparsely punctate dorsally; spiracle at apical 0.32; second tergite 0.70 times as long as broad, closely punctate, shiny apically; rest of the tergites mostly shiny; ovipositor sheath 0.80 times as long as hind tibia; ovipositor long, 0.82 times as long as hind tibia.

Black. except yellowish frons laterally, clypeus, cheek, mandible basally, collar, tegula, pronotum dorsoposteriorly, sixth to ninth flagellar segments above, first, second and fourth abdominal tergites apically, fifth to seventh abdominal tergites posterolaterally, scutellum, postscutellum; legs except first and second coxae, first abdominal segment basally, ovipositor brown.

♂ : Similar to female.

Holotype : ♀ , INDIA : Maharashtra : Sangli

21 IX 1987, reared on caseworm, Dr. K.S.Heble coll.

Antenna, wings and claws mounted on slides and labelled as above.

Paratype : 1 ♀ , 1 ♂ , data same as above.

#### DISCUSSION

According to the description available in the literature P. psychitus sp. nov. runs close to P. hiatus Townes in the characters of palpi, postpectal carina, forewing, clypeus, temple, genal carina and mandibular teeth. However, it differs from the same in having (1) propodeum closely rugosoreticulate, (2) second abdominal tergite closely punctate, (3) absence



of propodeal apical carina medially, (4) yellowish white subtegular ridge, frons laterally, vertex, face medially and laterally and clypeus basally.

GENUS CHIROTICA FOERSTER, 1868

Chirotica Foerster is a small genus, of worldwide distribution. It belongs to the subtribe Chiroticina, tribe Gelini of the subfamily Gelinae. It parasitizes Psychidae.

Townes (1970a) synonymised Aphadnus rufipes Cameron, 1907b, Bathythrix striatus Cameron, 1905c, and Hemiteles bifasciatus Szepliget, 1908 with Hemiteleas decoratus Tosquinet, 1903 and given Chirotica decorata Tosquinet as a new combination. Here C. willingdoni sp. nov. is described for the first time from Western Maharashtra.

Chirotica willingdoni sp. nov. (Fig. 9 a-c)

♀ : Body 7.74mm. long. Head 0.74 times as long as broad, in profile 1.52 times as long as high; vertex moderately sparsely punctate; ocellar triangle very sparsely punctate; lateral ocellus separated from eye by 2.20 times its diameter; frons 0.80 times as long as broad, finely, closely punctate with transverse wrinklins; antenna 2 + 26 segmented; scape 1.40 times as long as broad; pedicel 2 times as long as broad; first flagellar segment as long as the length of scape and pedicel combined; terminal flagellar segment 2.30

times as long as broad; face 0.60 times as long as broad, centre of face raised into tubercle, striatopunctate; clypeus 0.42 times as long as broad, convex, impunctate; mandible 1.70 times as long as broad, sparsely punctate, teeth equal; cheek 0.80 times as long as basal width of mandible, finely , closely punctate, striate laterally.

Thorax 1.71 times as long as broad; collar shiny, smooth; pronotum closely, obliquely striatopunctate, ventrally striate; mesoscutum transversely striatopunctate, median lobe with weak dorsomedian long groove; notaulus reaching behind centre of mesoscutum; scutellum convex as long as broad, coarsely rugosoreticulate, medially smooth; postscutellum sparsely punctate; propodeum with strong transverse carinae and only median longitudinal carina reaching the propodeal crest; areola and basal area confluent; first lateral area striatopunctate; second lateral area reticulate; first and second pleural area confluent; petiolar area reticulate; third lateral area striate; propodeal apophysis flanged; mesopleurum rugosoreticulate; mesopleural fovea below speculum in the form of isolated pit; sternaulus basally strong reaching beyond midlength of mesopleurum; prepectal

FIGURE 9. Chirotica willingdoni sp. nov. , ♀

- a. Lateral view, entire,
- b. Basal antenna, showing scape, pedicel and  
first flagellar segment,
- c. Lower division of metapleurum.

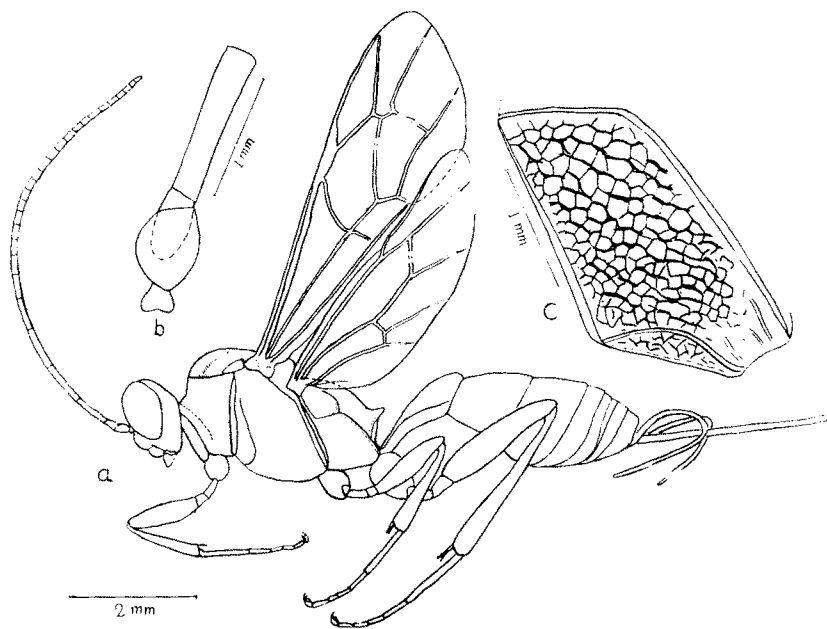


Fig. 9

carina reaching above midheight of mesopleurum near front margin of mesopleurum; prepectus closely striatopunctate; postpectal carina broadly interrupted in front of mid coxae; mesepimeron narrow, finely, sparsely punctate; metapleurum striatoreticulate, upper division of metapleurum closely, finely, punctate; propodeal spiracle rounded ; submetapleural carina complete; legs moderate; first hind trochanter 1.06 times as long as second; hind tarsal claw 3 times as long as broad, weakly curved; hind basal tarsal segment 10 times as long as broad; tegula shiny, sparsely, finely punctate. Forewing 5.53 mm. long, 1.70 mm. broad, biinfusate; stigma 4 times as long as broad; basal abscissa of radius 0.5 times as long as its apical abscissa; areolet open; intercubitus small; discocubitus fenestrate medially; second recurrent with two bullae; basal abscissa of sub discoideus 1.83 times as long as its apical abscissa; nervulus fenestrate at lower end, 0.60 times the length postnervulus; basal vein moderately curved; hindwing 4.10 mm long, 1.10 mm ~~broad~~ with 1+5 hamuli; basal abscissa of radiella 0.25 times the length of its apical abscissa; basal abscissa of cubitella as long as its apical abscissa; intercubitella fenestrate medially; superior and inferior nervellar abscissae in the ratio of 2:1.

Abdomen 1.26 times the length of head and thorax combined; first tergite 1.63 times as long as its apical width, longitudinally striate except smooth and shiny apex, with lateral teeth at its base, laterally punctate; median dorsal carina absent; dorsolateral carina complete; spiracle at apical 0.42; second and third tergite strongly, longitudinally striatopunctate except shiny apex; fourth tergite basally striate, apically shiny, very sparsely punctate; fifth and following tergites finely closely punctate; ovipositor 1.55 times as long as hind tibia, apically slightly curved, pointed, nodus raised.; ovipositor sheath 1.09 times the length of hind tibia.

Black. Pronotum, tegula, first, second and fourth abdominal tergites midapically, fifth, sixth and seventh flagellar segment above whitish yellow; legs, first and second abdominal tergites basally, ovipositor brown.

Holotype: ♀, INDIA : Maharashtra: Satara, 22 VIII 1987, on wing, K.S.Heble coll., Antenna, wings and claws mounted on slides and labelled as above.

Paratype : 2 ♀♀, data same as above.

DISCUSSION

Chirotica willingdoni sp. nov. resembles with C. decorata Tosquinet, in the characters of vertex, frons, scape, face, mandible, pronotum, mesopleurum, mesopleural fovea, basal abscissa of radius and areolet; but differs from the same in having (1) first flagellar segment as long as the length of scape and pedicel combined, (2) metapleurum striatoreticulate, (3) basal abscissa of cubitella as long as its apical abscissa, (4) absence of brachiella, (5) pedicel 2 times as long as broad, (6) collar smooth, (7) areola confluent with basal area, (8) cheek 0.80 times as long as broad, (10) ovipositor sheath 1.09 times the length of hind tibia.



GENUS GAMBRUS FOERSTER, 1868

Gambrus Foerster is closely related to the genus Agrothereutes Foerster and Aritranis Foerster. It is distinguished from these in having characters, mesoscutum more or less punctate; apical propodeal carina complete medially, the median portion turned only moderately forward; hind tibia without a basal whitish band. This belongs to the subtribe Agrothereutina, tribe Mesostenini of subfamily Gelinae. Gambrus is Holarctic genus. There are nine Nearctic species, and in Eurasia probably a larger number. Here, it is recorded and described by G. sangliensis sp. nov. for the first time from Oriental region (India). A key to the Indo-Australian species of Gambrus is also included.

KEY TO THE INDO-AUSTRALIAN SPECIES OF GAMBRUS FOERSTER

Mesoscutum mat and with moderate sized or fine punctures; apical carina of propodeum forming a weak crest; areolet always subquadrate; frons without reticulation.

Hawaii..... ultimus Cresson.

Mesoscutum striatopunctate; sublateral apical carina of propodeum forming a strong crest; areolet pentagonal, and frons transversely reticulate with

median longitudinal carina.

India.....sangliensis sp. nov.

Gambrus sangliensis sp. nov. (Fig.10 a - d )

♀ : 12 mm. Head (Fig.10 b) 0.87 times as long as broad, in profile 2 times as long as high; vertex finely, closely punctate; ocellar triangle finely, closely punctate, lateral ocelli separated from eyes by 2.20 times their diameter; frons 0.63 times as long as broad, transversely, closely reticulate, transversely striate centrally with median vertical carina interrupted between smooth concavity below; antenna 2+31 segmented; scape 1.38 times as long as broad; pedicel 1.80 times as long as broad; first flagellar segment 1.02 times the length of scape and pedicel combined; terminal flagellar segment 2 times as long as broad; face 0.50 times as long as broad, with sublateral converging groove upto clypeal fovea, finely, closely striatopunctate; clypeus 0.45 times as long as broad, separated from face by a groove, convex, closely punctate; its apical margin convex without median tooth or lobe; mandible 1.40 times as long as broad, teeth equal basally finely, closely striatopunctate; cheek 0.83 times the basal width of mandible, finely granulose; temple finely, closely, shallowly punctate;

genal carina joining oral carina far above the base of mandible; occipital carine complete.

Thorax 2.40 times as long as broad; collar shiny with very sparse, fine punctures; pronotum dorsally striatopunctate, ventrally obliquely striate, ventral posterior corner striatopunctate; epomia fine, reaching dorsal collar; mesoscutum convex, striatopunctate; notaulus converging posteriorly and reaching beyond the centre of mesoscutum; scutellum 1.06 times as long as broad, convex moderately shallowly punctate with flanged lateral carinae reaching upto its apex; postscutellum convex, shiny; propodeum with both transverse carinae and only basal median longitudinal carina; basal transverse carina medially slightly pushed forward; apical carina medially strongly arched forward; areola absent; basal area and first lateral area strongly striatopunctate; areola and second lateral area confluent, closely reticulate; petiolar area and third lateral area confluent, closely reticulate; pleural carina weak; pleural area closely reticulate and confluent with lateral area; propodeal apophysis semicircular and flanged; propodeal spiracle 2.20 times as long as broad; propleurum finely punctate; mesopleurum closely reticulate, dorsally striatopunctate; speculum

FIGURE 10. Gambrus sangliensis, sp. nov., ♀

- a. Lateral view, entire,
- b. Head in front view,
- c. Thorax in the dorsal view, showing  
mesoscutum and scutellum,
- d. Propodeum, dorsal view.

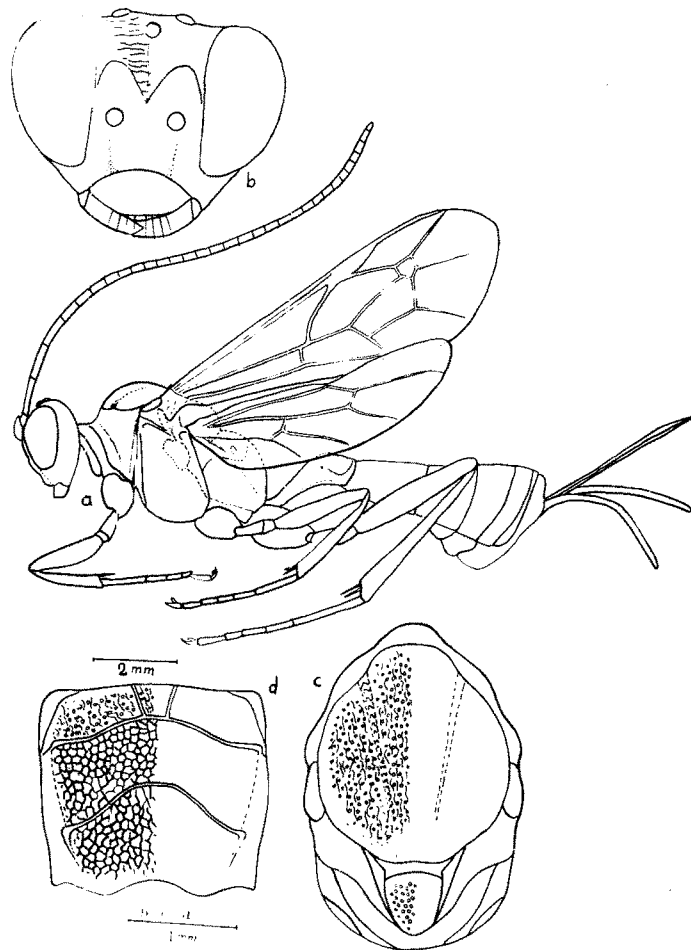


Fig. 10

striatopunctate, mesopleural fovea, in the form of broad pit; sternaulus basally deep and reaching below the hind lower corner of mesopleurum; prepectal carina reaching above mid height of mesopleurum and away from front margin of mesopleurum; postpectal carina broadly interrupted in front of mid coxae and in the form of straight carina on mesosternum; prepectus closely striatopunctate; mesepimeron narrow, finely, sparsely punctate, upper division of metapleurum very closely striatopunctate to reticulate; lower division of metapleurum reticulate; submetapleural carina complete; juxtacoxal carina complete, elevated and curved downward anteriorly and joining with submetapleural carina, legs moderate; first hind trochanter 2.15 times as long as second; hind tarsal claw 2.72 times as long as broad, moderately curved with hairs; hind basal tarsal segment 9.30 times as long as broad; tegula subshiny; subtegular ridge flanged. Forewing 7.70 mm long, 2.44 mm broad; stigma 4 times as long as broad; basal abscissa of radius 0.72 times as long as its apical abscissa, distal end of apical abscissa curved anteriorly; areolet pentagonal, as long as broad with parallel sides; second intercubitus fenestrate; second recurrent reclivous, medially broadly fenestrate, 3.66 times the length of cubitus between it and first intercubitus, 0.49 times

the length of basal abscissa of subdiscoideus; basal abscissa of subdiscoideus as long as its apical abscissa; nervulus inclivous by 0.24 times its length, fenestrate at lower end, 0.53 times the length of postnervulus; second discoidal cell 2.52 times as long as broad; discocubital cell 2.17 times as long as broad; hindwing 5.64 mm long, 1.54 mm broad, with 1+7 hamuli; basal abscissa of radiella 0.31 times the length of its apical abscissa, apical 0.60 of mediella weakly convex; basal abscissa of cubitella 1.07 times the length of its apical abscissa; intercubitella reclivous and curved; superior and inferior nervellar abscissae in the ratio of 9:5 .

Abdomen 1.48 times the length of head and thorax combined; first tergite 2.05 times as long as broad, 2.76 times as broad as its basal width, 1.40 times the length of second tergite, with strong lateral teeth at base; its median dorsal carina absent; dorsolateral carina reaching dorsally to postpetiole, ventrolateral carina complete, postpetiole curved with flanged dorsolateral edges, its spiracle at apical 0.30, moderately punctate; petiole dorsally with few punctures; laterally vertically rugosopunctate, midapically polished; its sternite free apically; second

tergite 0.88 times as long as broad, closely punctate, basally weakly, closely rugose, with dorsolateral polished elevation; rest tergites finely mat; basal sixth and seventh tergite polished; ovipositor sheath flexible, 1.10 times as long as hind tibia; ovipositor moderately long, stout compressed; nodus with very fine notch, tip of upper valve polished, its apex slightly extending beyond the apex of lower valve, tip of lower valve with oblique ridges.

Black. Clypeus and mandibles medially, occiput medially, palpi, pronotum except lower corner, mesonotum, scutellum, metanotum, mesopleurum anterodorsally, tegula, legs mostly, first abdominal segment except dorsal and lateral petiolar region and second abdominal segment brown; fifth to ninth flagellar segments above and seventh abdominal tergite dorsoapically white.

♂ : Similar to female.

Holotype; ♀, INDIA; Maharashtra; Sangli, 15 XI 1986, on wing, K.S.Heble coll. Antenna, wings and claws mounted on slides and labelled as above.

Paratype : 1 ♂, data same as above.



DISCUSSION

Gambrus sangliensis sp.nov. resembles with G.ultimus Cresson, from Holarctic region, in the charactes of notaulus, propodeal carinae, areolet and first abdominal tergite. It differs from the same in having (1) apical margin of clypeus without median lobe or tooth, (2) mesoscutum striatopunctate, (3) sublateral apical carina of propodeum forming prominent crest, (4) areolet pentagonal, (5) frons transversely reticulate with median longitudinal carina.

GENUS CHLOROCRYPTUS CAMERON, (1903)

Chlorocryptus Cameron is a moderate genus and distributed in Oriental and eastern Palearctic regions. It belongs to the subtribe Baryceratina, tribe Mesostenini of subfamily Gelinae. One species has been reared from eucleid cocoons (Cnidocampa flavescens). Townes, Townes and Gupta (1961) included 5 species under this genus from Indo-Australian region. Of these, only two belongs to Assam and Sikkim from India. The diagnostic characters of this genus are prismatic petiole; postpetiole with a prominent angle between its dorsal and lateral faces; and large, metallic peacock body colouration. Here, it is recorded and described by C. ganeshii sp. nov. for the first time from Maharashtra (Sangli).

Chlorocryptus ganeshii sp. nov. (Fig. 11 a-d)

♀ : 19 mm. long; Head (Fig. 11 b ) in profile 0.70 times as long as high; vertex sparsely punctate, striate towards ocelli; ocellar triangle moderately striatopunctate; ocellus separated from eye by 1.80 times its diameter; frons dorsally striatopunctate, medially obliquely, strongly striate with median longitudinal carina, smooth below scape; antenna 2 + 32

segmented; scape 1.40 times as long as broad, with moderate close punctures; pedicel 2.10 times as long as broad; first flagellar segment 4 times as long as broad; apical segment 1.60 times as long as broad, conical; orbit finely punctate; face bulged medially, closely striatopunctate with transverse striations below antennal sockets; clypeus 2.27 times as long as broad, convex, closely striatopunctate, medially and apically with few large punctures; its apical margin convex with elevated corners; clypeal fovea small; mandible 1.28 times as long as broad, basally coarsely striatopunctate, apically finely, sparsely punctate, lower tooth shorter; cheek 1.13 times as long as the basal width of mandible, granulose; temple finely, closely striatopunctate; occiput closely striatopunctate; post occiput concave, smooth; occipital carina complete; genal carina joining oral carina far above the base of mandible.

Thorax 1.24 times as long as high; collar dorsally striatopunctate; laterally finely, sparsely punctate; epomia long, turned anteriorly, reaching anterodorsal pronotum; pronotum dorsally, strongly striatopunctate, strongly transversely striate below; mesoscutum convex, strongly striatopunctate except reticulate notaular

FIGURE 11. Chlorocryptus ganeshii, sp. nov., ♀

- a. Lateral view, entire,
- b. Head in front view,
- c. Mesoscutum and scutellum,
- d. Propodeum in dorsal view.

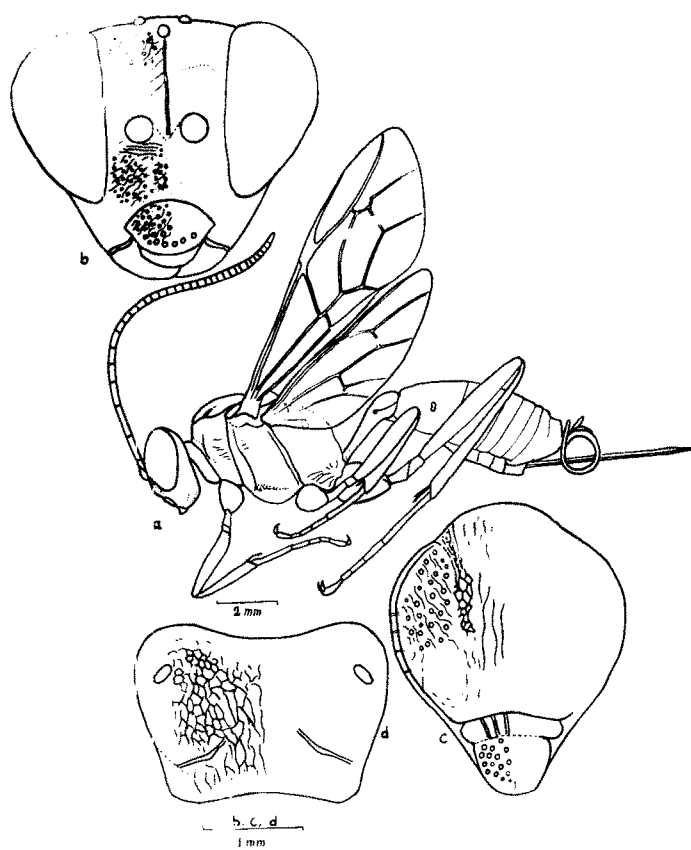


Fig. 11

region, six longitudinal striations on median lobe and smooth distal lateral lobes; notaulus moderate reaching beyond the centre of mesoscutum; scutellum moderately convex, laterally strongly punctate, medially with few large punctures, apically smooth; scutellar depression with six longitudinal keels; postscutellum small, smooth; propodeum 0.72 times as long as broad, with medially interrupted apical carina, strongly reticulate; apophysis moderate, flanged, semicircular; propodeal spiracle elliptical, 2.43 times as long as broad; propleurum finely closely striatopunctate, smooth above;

medially interrupted apical carina, strongly reticulate; apophysis moderate, flanged, semicircular; propodeal spiracle elliptical, 2.43 times as long as broad; propleurum finely closely striatopunctate, smooth above; mesopleurum obliquely, strongly striate, striatoreticulate above, moderately striatopunctate below; speculum smooth; sternalus strong and broad basally, reaching above posteroventral corner of mesopleurum; subtegular ridge, moderately flanged, receiving vertical flange from above; prepectal carina moderately strong, sinuate, reaching anteriorly to subtegular ridge; prepectus closely striatopunctate;

mesopleural impression in the form of moderate pit, close to the mesopleural suture; upper division of metapleurum sparsely punctate; lower division of metapleurum striatoreticulate; juxtacoxal carina moderately sinuate; hind claw 3.33 times as long as broad; basally pectinate. Forewing 11 mm long, 3.95 mm broad; stigma 4.25 times as long as broad; basal abscissa of radius 0.66 times the length of its sinuate apical abscissa; areolet pentagonal, as long as broad, sessile; first intercubitus 1.28 times the length of second intercubitus; second intercubitus fenestrate; second recurrent subvertical, medially fenestrate. 4.87 times the length of cubitus between it and first intercubitus 0.48 times the length of subdiscoideus; basal abscissa of subdiscoideus 1.25 times as long as its apical abscissa; nervulus curved, slightly reclivous, fenestrate at lower end, distad by 0.22 times its length, 0.53 times the length of post nervulus; second discoidal cell 2.48 times as long as broad; hindwing 7.50 mm long, 2.10 mm broad, with 1+9 hamuli; basal abscissa of radiella 0.48 times as long as its apical abscissa; basal abscissa of cubitella 1.20 times the length of its apical abscissa; intercubitella reclivous; slightly curved and fenestrate below centre;

superior and inferior nervellar abscissae in the ratio of 19:9.

Abdomen 1.31 times the length of head and thorax combined, oval in the dorsal view; abdominal tergites moderately, closely punctate; first tergite 2.48 times as long as broad, 1.26 the times the length of second tergite with lateral triangular teeth at base, postpetiole slightly curved; its spiracle oval, at apical 0.32; 1.35 times as long as broad; second tergite 0.68 times as long as broad, 2.65 times the width of first tergite; second abdominal spiracle at the centre of the tergite, kidney shaped, vertical; ovipositor sheath 1.05 times as long as hind tibia; ovipositor straight thick; tip of lower valve with eight oblique ridges; tip of upper valve with weak transverse ridges.

Metallic peacock coloured except dark brown pedicel, flagellum, eye, trochanter, tibia, tarsus, ovipositor sheath; ocelli light brown.

Holotype : ♀, INDIA: Maharashtra :Sangli, 10 X 1983 on wing K.S.Heble. coll. Antenna, wings and claws mounted on slides and labelled as above.

Paratype : 1 ♀, data same as above except date 15 IX 1984.



DISCUSSION

In India C.Coeruleus Cameron and C.metalicus Cameron have been recorded for the first time by Cameron (1903). C.ganeshii sp. nov. resembles with C.metalicus in the characters of scape, mandible, scutellum, postscutellum, mesosternum, legs and abdomen. It differs from the same in having (1) face dorsally with prominent, transverse striations, (2) clypeus apically with large punctures, (3) median lobe of mesonotum longitudinally striate with smooth median area, (4) scutellar depression with six longitudinal keels, (5) propodeum reticulate, (6) eighth to thirteenth flagellar segments dark brown, and (7) mesonotum metallic blue green.