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# ON A NEW GENUS AND SPECIES OF DERMAPTERA (INSECTA : OPISTHOCOSMIINAE)

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## INTRODUCTION

The genus *Cordax* was described by Burr (1910) with *Forficula armata* Haan, 1942 from Burma (Myanmar) as the 'Type' and *Labia ceylonica* Motschulsky, 1863 from Sri Lanka. It appears that the description of the genus was based on the specimens from SE Asia belonging to Type species but in fact belong to some other species as is evident from the figure (Burr, 1910, fig. 67).

Srivastava (1982) examined the Syntype male of *F. armata* and designated it as 'Lectoype male' of the species. The first antennal segment in this specimen is flat above with lateral margin sharp or carinate and convex below.

In the light of this it is proposed that *Cordax* should include only those species that possess antennal segments similar to the Type species.

All other species hitherto include under this genus having basal segment long and cylindrical should be placed under the genus described below.

***Paracordax*** gen. n.

Build slender and form elongated. Head tumid, sutures distinct or obsolete; eyes prominent. Antennal segments long and cylindrical, longer than the distance between antennal bases; 2nd short; 3rd a little shorter than 4th and 5th a little longer than 4th. Pronotum longer than broad, anteriorly a little narrower than head, sides straight and hind margin briefly or strongly convex. Elytra and wings well developed, former without lateral longitudinal ridge. Legs long and slender, femora scarcely thickened; tiviae compressed; 1st tarsal segment longer than the combined length of 2nd and 3rd. Abdomen convex, elongated or spindle shaped. Ultimate tergite, narrowed posteriorly, sloping backwards. Forceps long and slender, remote of contiguous at base, internal margin with several or sometimes one or two teeth only. Forceps in females simple and straight.

*Type species : Cordax politus* Burr, 1910.

*Distribution :* Oriental and Ethiopian Regions and New Guinea.

*Remarks :* Altogether four species *viz., P. ceylonicus* (Motschulsky), *P. politus* (Burr), *P. vandermeermohri* (Menozzi) and *P. cornutu* (Srivastava), are represented from the Oriental Region. A new species from India is described gere. These can be separated by the following key.

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According to Sakai (194, p. 6110), *Cordax goliath* Steinmann, 1982 may be a synonym of *Eparchus burii* (Bormans in Burr, 1903) in having identical forceps which seems to be correct. But the synonymy of *Cordax cornutus* Srivastava, 1991 with *C. golitha* is not possible since former has quite different forceps with branches contiguous in basal one third, not terminating into an internal tooth, afterwards incurved in apical two third (*vs* contiguous in basal two thirds, terminating into an internal sharp tooth, afterwards incurved in apical one third in *C. goliath).*

Taxonomic status of *Labis cylonica* Motshulsky, 1863 is not satisfactorily established. It was originally described on a female and male was subsequently recorded by Dohrn (1865) and described as having the forceps contiguous at base, afterwards broadly arcuate and meeting at apex. Sakai (l.c., p. 6140) has figured a male specimen from BMNH (British Museum of Natural History, London) which has identical forceps. Besides, one male from Sri Lanka, dt. by Brindle (1971) has been examined by me and it possesses forceps contiguous all along its length.

Key to the species (based on males only)

1(4). Forceps remote at the base; pygidium, distinct, vertical, longer than broad, narrowed apically with hind margin concave

2(3). Penultimate sternite with hind margin truncate in middle (fig.1); forceps (fig.2) with branches almost straight, slightly undulated in middle, attenuated with apices gently hooked, internal margin in basal two thirds differentiated in dorsal and ventral borders, with several large and small teeth .....*P. politus* (Burr)

3(2). Penultimate sternite (fig.3) with hind margin rounded; forceps (fig. 4) in basal two thirds broadly arched enclosing an elongated oval space, afterwards contiguous, tips gently hooked, internally at base with fine serations, at basal one third with a vertical triangular tooth directed internally and with another blunt tooth below at apical one third ....*Paracordax julkai* sp. n.

4(1). Forceps with brances contiguous or subcontiguous in basal one third; pygidium small, not as above

5(6). Forceps (fig.7) with a vertical tooth above and two teeth internally....*P. cornutus* (Srivastava)

6(7). Forceps serrated internally, otherwise unarmed

7(8). Forceps contiguous at base only, afterwards arcuate (fig.8) or contiguous all along its length (fig.9), almost straight, tapering apically with tips gently hooked ...*P. ceylonicus* (Motschulsky)

8(7). Forceps (fig.10) subcontiguous and feebly dilated at base for some distance, afterwards incurved, internally with a convexity at about apical one third...*P. vandermeermohri* (Menozzi)

***Paracordax julkai*** sp. n.

Male : General colour shining brownish black with oily lustre, sides of pronotum yellowish, form cylindrical.

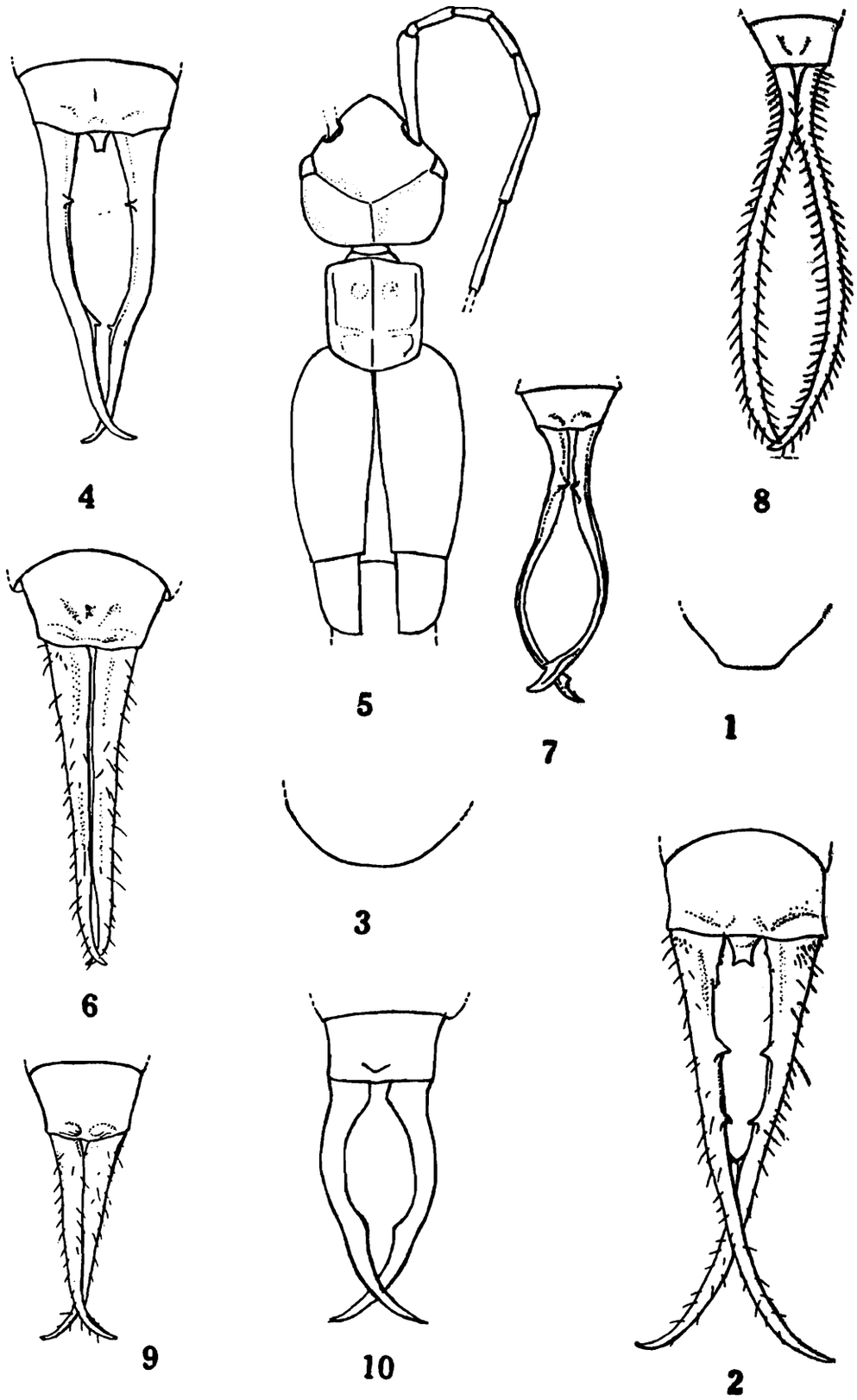
Head about as long as broad, smooth, frons and occiput raised, sutures distinct, hind margin almost straight and angles rounded; eyes prominent but distinctly shorter than post-ocular length. Antennae broken in the Holotype Male, except the left basal segment, long and cylindrical, distinctly longer than the distance between antennal bases. Pronotum smooth, longer than broad, anteriorly narrower than head, sides gently reflexed, parallel, hind margin rounded, median sulcus distinct, prozona weakly raised and well differentiated from depressed metazona. Legs long and slender, femora and tibia compressed, hind tarsi with 1st segment longer than the combined length of 2nd and 3rd; 2nd lobed. Elytra and wings well developed, coriaceous, former obscurely micro-reticulated with hind margin oblique. Abdomen spindle shaped, tergites feebly convex, smooth, lateral folds on 3rd and 4th tergites distinct, sides of segments convex, smooth. Penultimate sternite transverse, posterior margin broadly rounded. Ultimate tergite transverse, narrowed posteriorly, depressed and declivent posteriorly, hind margin weakly trisinuate, oblique above the base of forceps. Pygidium vertical, broader at base, narrowed apically, hind margin feebly concave. Forceps with long and short pubescence, branches cylindrical, remote at base, gently incurved enclosing an elongated space in basal two thirds, afterwards contiguous and straight, apices attenuated and hooked, internal margin with fine serrations at base, a small vertical, triangular tooth above, close to inner margin directed inwards at basal one third and another smaller blunt, ventral tooth at apical one third present. Genitalia with parameres slightly longer than broad, narrowed basally, apical margin rounded.

Female : Agrees with male in most characters except that long pubescence more pronounced on the sides of abdomen and forceps, head orange, legs sometimes clear yellow; antennae broken (maximum number remaining nine only), segments long, thin and cylindrical, 3rd slightly shorter than 4th, narrowed basally; 4th thin, feebly narrowed basally; 5th onwards gradually increasing in length and thinning; penultimate sternite obtusely rounded posteriorly; pygidium indistinct; forceps simple, contiguous and straight.

*Measurements* (in mm) : Holotype Male : Length : Body -9.2; forceps -3.9; Paratypes 4. Females : Length : Body -8.7 -9.1; forceps -3.1 -4.6.

*Material examined:* INDIA : Arunachal Pradesh : Subansiri Dist., Galeusiank, 1350m, Holotype Male, 10. XII. 1974; same data, Gemo, 1600m, Paratype 1 Female, 9. XII. 1974; sama data, Damia, 1100m, Paratype 1 Female, 22. XII. 1974 and sama data, Taksing, Surita Top, 3200m, Paratype 1 Female, 22. XII. 1974, all Dr. J. M. Julka Coll. and deposited in the Zoological Survey of India, Calcutta.

*Remarks* : The described species come close to *P. politus* (Burr) in having long and slender build, long pubescence on abdomen and forceps and somewhat similar pygidium, in males, but differs by the shape of penultimate sternite broadly rounded posteriorly (*vs* truncate in *P. politus*); pygidium more strongly narrowed posteriorly and hind margin feebly emarginate (*vs* broader and hind margin distinctly emarginate and postero-lateral angles produced into minute point), and forceps with branches cylindrical, broadly incurved in basal two thirds, afterwards contiguous and straight, internally armed with fine dentation at base, a dorsal triangular tooth directed inwards present at basal one third and a ventral obtuse tooth at apical one third also (*vs* branches almost straight, at about middle undulated, gently incurved in apical one third, internal margin on ventral and dorsal border with several small or large triangular teeth present in basal two thirds.




**Figs. 1-10 :** *Paracordax politus* (Burr), ♂ 31, 1. Posterior margin of penultimate sternite, 2. Ultimate tergite, pugidium and forceps; *Paracordax julkai* sp. n., Holotype, ♂, 3. Posterior margin of penultimate sternite 4. Ultimate tergite and forceps, 5. Anterior portion of body, ♀, 6. Ultimate tergite and forceps; *Paracordax cornutus* (Srivastava), ♂, 7. Ultimate tergite and forceps, *Paracordax ceylonicus* (Motschulsky), ♂, 8-9. Ultimate tergite and forceps, *Paracordax vandermeermohri* (Menozzi), ♂, 10. Ultimate tergite and forceps.

## SUMMARY

A new genus *Paracordax* is described with *Cordax politus* Burr, 1911 as the type-species and a new species *Paracordax julkai* from India. Besides all other species earlier included under *Cordax* Burr, 1910 which possesses basal antennal segment long and cylindrical will also be included under it. Henceforth, *Cordax* will be characterised by the presence of basal antennal segment deplanate above, laterally faintly raised or carinate and convex below and will include the type species, *Forficula armata* Haan, 1842 and *Timomenus vicinus* Steinmann, 1982, for the present.

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