

A NEW SPECIES OF *IPHIAULAX* FOERSTER
(HYMENOPTERA: BRACONIDAE) FROM INDIA¹

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(With three text-figures)

Key words: Hymenoptera, Braconidae, Braconinae, *Iphiaulax* sp. nov.

Iphiaulax marathwadensis sp. nov. is illustrated and described. A key to the Indian species of *Iphiaulax* is also provided.

INTRODUCTION

Foerster (1862) erected the genus *Iphiaulax* with the type species *Ichneumon impostor* Scopoli. *Iphiaulax* belongs to the subfamily Braconinae and is distributed worldwide.

In India, only eleven species of *Iphiaulax* Foerster are recorded so far (Shenefelt 1978) and the following workers have contributed on the same: Brulle (1846), Cameron (1899, 1900, 1905, 1907, [1912] 1913) and Lal (1939).

In the present work, a new species *Iphiaulax marathwadensis* is described from material collected in India, Maharashtra, Aurangabad. The new taxon has been compared with seven species whose literature was available. A key to these Indian species of *Iphiaulax* is also provided.

Types have been deposited in the entomological collection of the Department of Zoology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

***Iphiaulax marathwadensis* sp. nov.**

(Figs. 1-3)

Female: Body (Fig. 1) 11.2 mm. Head

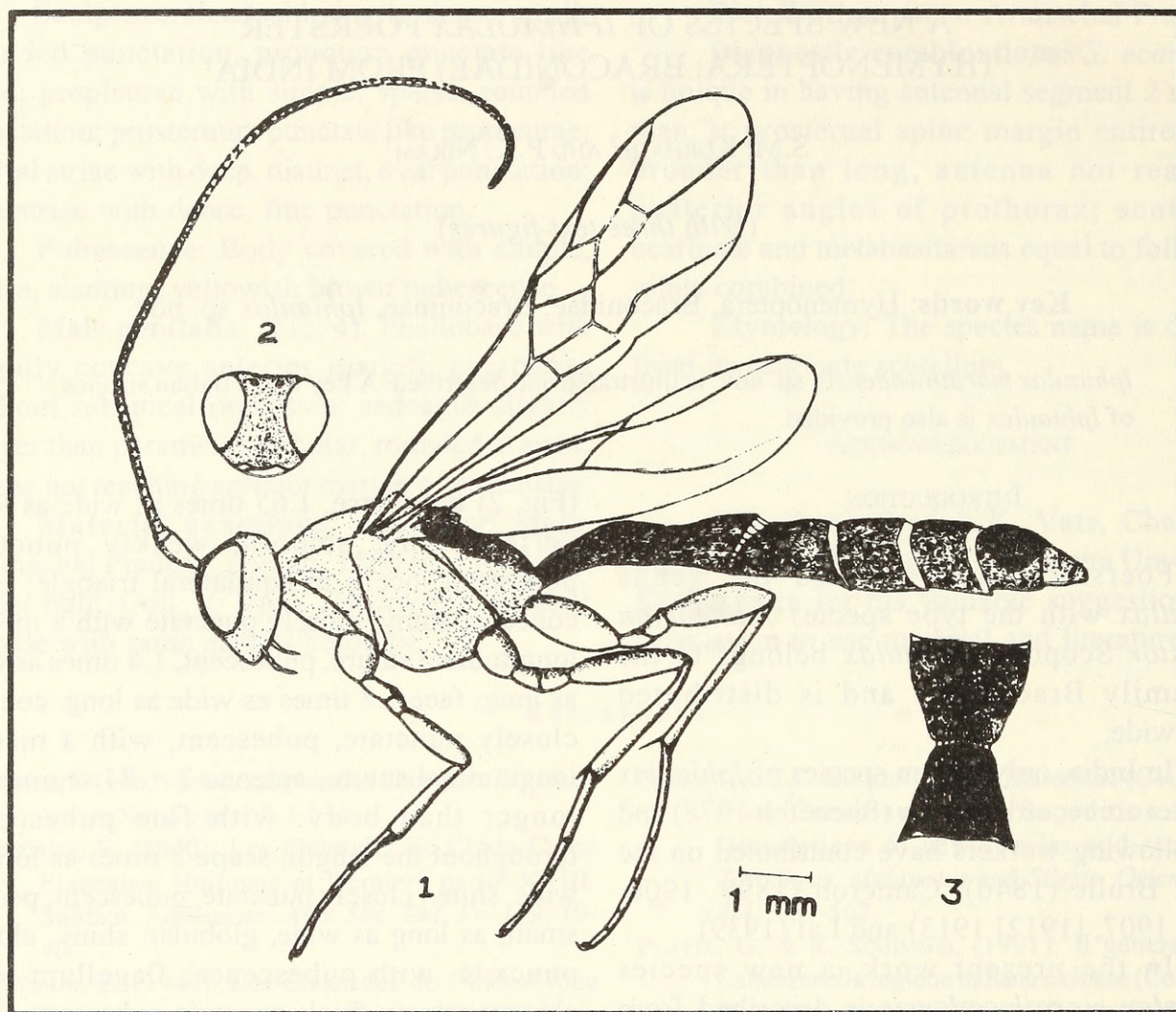
(Fig. 2) transverse, 1.65 times as wide as long; vertex shiny, smooth, weakly punctate, pubescent; ocelli in equilateral triangle; frons concave, shiny, closely punctate with a median longitudinal suture, pubescent, 1.4 times as wide as long; face 1.8 times as wide as long, convex, closely punctate, pubescent, with a median longitudinal suture; antenna 2 + 84 segmented, longer than body, with fine pubescence throughout the length; scape 2 times as long as wide, shiny, closely punctate, pubescent; pedicel small, as long as wide, globular, shiny, closely punctate, with pubescence; flagellum long; clypeus narrow, finely punctate, pubescent; malar space narrow, closely punctate, with pubescence, 0.65 times the basal width of mandible; mandible stout, bidentate; eyes twice as long as wide, bare; interorbital distance as wide as the width of the eye; occipital carina absent; temple 0.7 times the width of eye, shiny, weakly punctate, with pubescence.

THORAX: 1.8 times as long as wide; pronotum shiny, smooth, weakly punctate, pubescent; mesoscutum shiny, smooth, weakly punctate, pubescent; middle lobe bulged; notauli distinct; scutellum convex, shiny, smooth, weakly punctate, pubescent; lateral carinae not distinct; mesopleurum shiny, sparsely punctate, with pubescence; mesopleural furrow distinct, extending 0.6 times the length of mesopleurum; metapleurum shiny, closely punctate, with pubescence; propodeum (Fig. 3) shiny, smooth,

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Figs. 1-3: *Iphiaulax marathwadensis* sp. nov. Female: 1. Lateral view, entire; 2. Head, viewed from front; 3. Propodeum with first abdominal tergite.

weakly punctate, with stout pubescence; propodeal spiracle large, oval. Hind coxa 2.3 times as long as wide, shiny, closely punctate, pubescent; trochanter I + II twice as long as wide, shiny, closely punctate; femur twice as long as wide, shiny, slender, closely punctate, with pubescence; tibia 6.5 times as long as wide, slender, wide at apex, closely punctate, with fine pubescence; long tibial spur 0.9 times the tibial width; tarsus 5 segmented; basitarsus elongated, finely punctate, with pubescence, 5 times as long as tibial spur; claw simple, bifid.

Forewing 4.8 times as long as broad; stigma 5.8 times as long as wide; metacarp 1.2 times as long as stigma; first abscissa of radius 0.6 times the second abscissa; second abscissa

of radius as long as apical abscissa; third abscissa of radius not longer than $r_1 + r_2$; first intercubitus 1.3 times as long as 2nd intercubitus; second cubital cell 3 times as long as wide, with four unequal sides; cubitus 3 times as long as stigma, sclerotized throughout the length; costa 1.4 times as long as medius; nervulus slightly inclivous, 1.6 times as long as width of stigma; first brachial cell 2.3 times as long as wide; submedius 3 times as long as brachius; subdiscoideus 1.5 times as long as discoideus; anal cell 18.8 times as long as wide, with two dark brown patches in the middle and one faint brown patch in the apical region; hind wing 4.8 times as long as broad; nervellus reclivous, as long as submediella; basella 0.3 times the

mediella, sclerotized; cubitella 0.8 times the mediella; radiella 0.6 times the subcostella.

ABDOMEN: 3.6 times as long as wide; first tergite twice as long as wide basally, 1.1 times as long as wide apically, excavated anteriorly, with dorsal carina, deeply strigose, sparsely punctate, with pubescence, dorsolateral carinae distinct; second tergite wider than long, 0.95 times its own width, deeply strigose, closely punctate, with pubescence; third tergite 1.7 times as wide as long, strigose mid-dorsally, rugose laterally, sparsely punctate, pubescent; remaining tergites rugose, closely punctate, pubescent; ovipositor 7.35 times as long as hind basitarsus; ovipositor sheath as long as ovipositor, with fine bristles throughout the length.

GENITALIA: Gonoforceps, volsellae and aedeagus situated on the sclerotic ring; volsellae enclosed by gonoforceps; gonosquamae short, strongly obliquely truncate, rounded apically, with stiff bristles at the apex; gonostipes curved; gonocardo pointed; gonolacinae weakly tapered apically, teeth absent; apodeme elongated; distivolsella moderately globular, pointed apically; basivolsella elongated; basivolsellar strut distinct; aedeagus moderately sclerotized, apically rounded, without teeth; parameres short, moderately globular, apically rounded; subgenital plate transverse, smooth; anticosta rounded, spiculum absent.

Body: Yellowish-red. Scape, pedicel, flagellum, tip of mandibles, ovipositor sheath dark brown to black; two patches and apical margin of forewing, one light patch and apical margin of hindwing, stigma, veins brownish-black.

Male: Agrees with female except (i) length 12.2 mm and (ii) malar space 0.7 times the basal width of mandible.

Holotype: Female, INDIA: Maharashtra: Aurangabad, 15. x. 1986, on wing. Coll. P.K. Nikam; Antenna, wings and legs mounted on slides and labelled as above.

Allotype: Male, data same as holotype.

Paratypes: 6 females, 4 males, data same

as holotype.

Remarks: In the key to the Indian species of *Iphiaulax*, the new species *Iphiaulax marathwadensis* superficially resembles *Iphiaulax sal* Cameron [1912] 1913 in having: (i) face closely punctate, (ii) first tergite with distinct dorsolateral carinae and (iii) wings fuscous. However, the new species differs from the same in the following characters: (i) vertex smooth, shiny, weakly punctate, pubescent, (ii) stigma dark brownish-black, (iii) third abscissa of radius not longer than first and second abscissa of radius, (iv) thorax shiny, smooth, (v) abdomen 3.6 x as long as wide, (vi) first tergite with dorsal carina, deeply strigose, sparsely punctate, with pubescence, (vii) second tergite deeply strigose, closely punctate, (viii) third tergite strigose mid-dorsally, rugose laterally, sparsely punctate and (ix) fourth tergite rugosely, closely punctate.

KEY TO THE INDIAN SPECIES OF *Iphiaulax*

1. The basal 5 abdominal tergites closely reticulate or punctate 8
- The basal 5 abdominal tergites differently sculpted 2
2. First segment of abdomen with basal slope smooth, shining, bordered by wide oblique crenulated furrow; body black.
..... *sal* Cameron [1912] 1913
- First segment of abdomen not smooth, shining; body differently coloured 3
3. First segment of abdomen deeply strigose, with dorsal carina, sparsely punctate, with pubescence, dorsolateral carinae distinct; body yellowish-red., *marathwadensis*, sp. nov.
- First segment of abdomen differently sculpted; body not yellowish-red 4
4. Abdomen smooth. The apex of first abdominal segment finely striate in the middle; second tergite much more strongly, irregularly striate. *hookeri* Cameron 1907
- Abdomen not smooth 5
5. Petiole coarsely, rugosely punctate except in the centre at the apex; lateral furrows with a few

NEW DESCRIPTIONS

- transverse keels; 2nd, 3rd, and 4th tergites more closely, rugosely punctate *smenus* Cameron 1905
- Petiole not coarsely, rugosely punctate; 2nd, 3rd and 4th tergites differently sculpted 6
6. Abdomen irregularly, rugosely punctate; without keel on the base of the 2nd segment *elizeus* Cameron 1905
- Abdomen without rugose punctures 7
7. Basal three abdominal tergites, stoutly, longitudinally striate *sikkimensis* Cameron 1907
- First tergite of abdomen with raised median triangular area, but with no keel in middle; apical margins of 2nd, 3rd and 4th tergites transversely grooved and longitudinally striate 8.
8. The basal five tergites of abdomen closely reticulate, punctate; suturiform articulation wide, crenulated *immsii* Cameron [1912] 1913.
- *safderezae* Lal 1939

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* Original not seen.





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