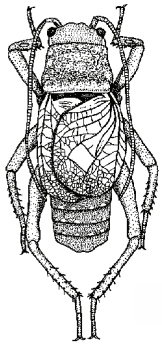

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FIRST RECORD OF THE GENUS *NIPPONODIPOGON* ISHIKAWA, 1965 (HYMENOPTERA: POMPILIDAE) FROM INDIA WITH DESCRIPTION OF A NEW SPECIES

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Summary. *Nipponodipogon indicus* Loktionov, **sp. n.** is described and illustrated from the Province of Arunachal Pradesh. New species is closely related to *N. iwatai* (Ishikawa, 1965), but differs from it mainly by a shape of the head and the mesosoma. The genus *Nipponodipogon* Ishikawa, 1965 is newly recorded from India.

Key words: Deuterageniini, spider wasps, new taxa, new record, Himalayas, Oriental Region.

В. М. Локтионов. Первое указание рода *Nipponodipogon* Ishikawa, 1965 (Hymenoptera: Pompilidae) из Индии с описанием нового вида // Дальневосточный энтомолог. 2020. N 398. С. 1-7.

Резюме. Из провинции Аруначал Прадеш описан *Nipponodipogon indicus* Loktionov, **sp. n.** Новый вид близок к *N. iwatai* (Ishikawa, 1965), но отличается от последнего формой головы и мезосомы. Род *Nipponodipogon* Ishikawa, 1965 впервые указывается для Индии.

INTRODUCTION

Spider wasp fauna of India is poorly understood. There are no modern faunistic and taxonomic works for this large area. Bingham (1897), in his monographic work, summarized all data on the family Pompilidae. Materials, on based of which this work has been published, were revised by Wahis (2018). As a result, fauna of spider wasps of India comprises 42 valid genera from four subfamilies. Of them, the tribe Deuterageniini Šustera, 1912, where the genus *Nipponodipogon* Ishikawa, 1965 belongs, is presented by a species from the genus *Deuteragenia* Šustera, 1912.

Nipponodipogon was created as a subgenus of the genus *Dipogon* Fox, 1897 by Ishikawa (1965). Based on phylogenetic analysis of the tribe Deuterageniini *Nipponodipogon* was erected to generic level (Lelej & Loktionov 2012). The genus is known from East Asia, both Palaearctic and Oriental parts. The revision of the seven East Palaearctic species of this genus, with data on their taxonomy, distribution, and biology was given by Shimizu *et al*. (2015). Later, three species were discovered from the Oriental Region for the first time (Loktionov *et al*., 2017; Loktionov & Lelej, 2018). In 2019 a new species was discovered from India, which is described and illustrated here. Currently the genus *Nipponodipogon* comprises 11 species including this new one. The genus is newly recorded from India (Arunachal Pradesh).

MATERIAL AND METHODS

The terminology for morphology is mostly based on the glossary provided by the Hymenoptera Anatomy Consortium (2013). The terminology of wing venation and cells follows Day (1988). The following abbreviations are used for morphological terms: UID, the upper interocular distance; MID, the middle interocular distance; LID, the lower interocular distance; OOD, the distance between posterior ocellus and compound eye which is measured from above; POD, the postocellar distance which is measured from above; S1, S2, S3, etc., the first, second, third metasomal sterna, etc.; SMC2, the second submarginal cell of fore wing; SMC3, the third submarginal cell of fore wing; T1, T2, T3, etc., the first, second, third metasomal terga etc.

Photographs were taken with an Olympus SZX16 stereomicroscope and an Olympus DP74 digital camera, then stacked using Helicon Focus software. The final illustrations were post-processed for contrast and brightness using Adobe® Photoshop® software. The holotype of new species is deposited in the collection of the Biologiezentrum des Oberösterreichischen Landesmuseums, Linz, Austria [OLL].

TAXONOMY

***Nipponodipogon indicus* Loktionov, sp. n.**

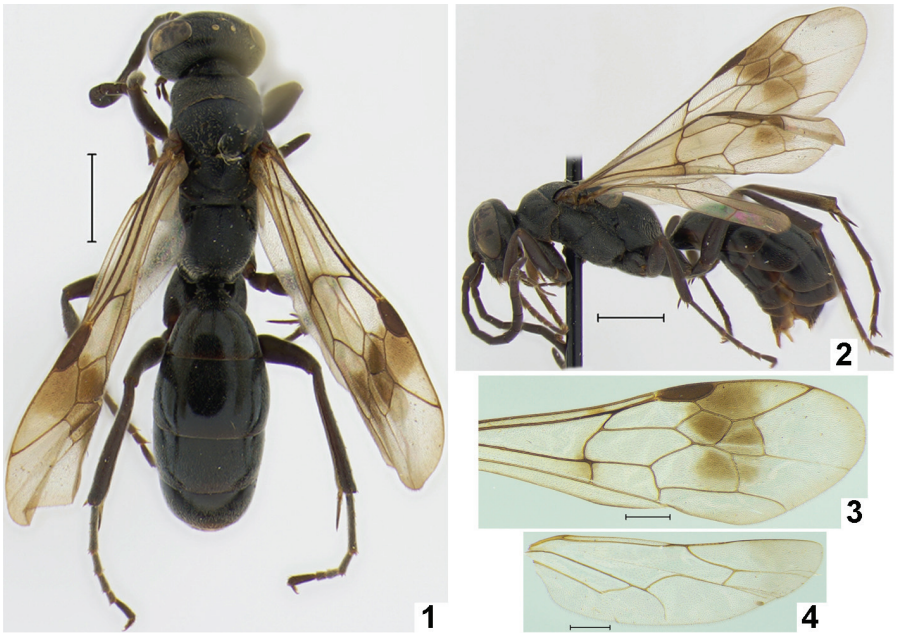
http://zoobank.org/NomenclaturalActs/8B5C1233-F49F-4826-902E-4DFB656481D4

Figs 1–9

TYPE MATERIAL. Holotype – ♀, **North-Eastern India**: Arunachal Pradesh, Etalin, 700 m, 28°36.56' N, 95°53.21' E, 15–25.V 2012, leg. O. Šauša [OLL].

DIAGNOSIS. Female. Outer apicoventral corner of the metafemur rounded. The transverse groove on S2 nearly straight (Fig. 9). T1 with a distinct parallel-sided portion basally. The vertex strongly convex between eye tops (Fig. 5). The mesosoma in dorsal view slender, its length 2.3 × its maximum width (Fig. 8).

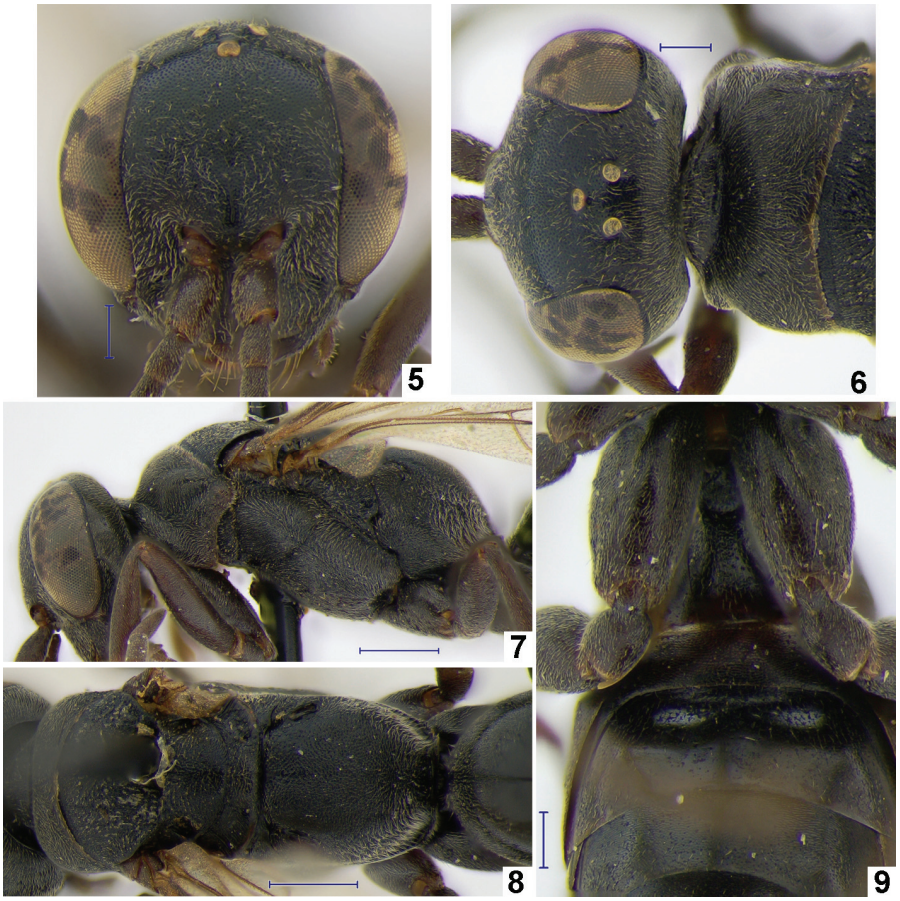
Male. Unknown.



Figs 1–4. *Nipponodipogon indicus* Loktionov, **sp. n.**, holotype, female. 1 – habitus, dorsal view; 2 – habitus, lateral view; 3 – fore wing; 4 – hind wing. Scale bar: 1.0 mm for 1 and 2; 0.5 mm for 3 and 4.

DESCRIPTION. FEMALE. Length: body 5.6 mm; fore wing 5.1 mm. Head and mesosoma matte, metasoma subpolished. Body black (Figs 1, 2). Apical half of mandible brown. Legs dark brown. Fore wing inner fascia weak, outer fascia distinct (Fig. 3).

Frons densely punctate, interspace of punctures polished. Pronotum and mesoscutum very densely and regularly punctate. Mesoscutellum and disc of metanotum more sparsely punctate than mesoscutum. Metanotum densely and regularly striate laterally. Mesepisternum finely and evenly punctate. Upper metapleuron finely and densely striate, interspace of striae punctate. Lower metapleuron densely punctate. Propodeum strongly and densely punctate, interspace of punctures less than their diameter. Metasomal terga finely punctate, interspace of punctures smooth and polished on T1 and T2, finely and weakly alutaceous on following terga.



Figs 5–9. *Nipponodipogon indicus* Loktionov, **sp. n.**, holotype, female. 5 – head, frontal view; 6 – head and pronotum, dorsal view; 7 – head and mesosoma, lateral view; 8 – mesosoma, dorsal view; 9 – meta coxae and S1–S3, ventral view. Scale bar 0.2 mm.

Body covered with fine, appressed, pale pubescence, that being long and dense on propodeum posterolaterally. Setae on vertex and propodeum gray to white, those on clypeus, labrum, mandible, and metasoma distally yellowish to light brown. Maxillary cardo with few thin, light brown bristles, the apex of those not extending beyond the maxillary lacinia. Head width 1.07 × its length in frontal view. Supra-antennal area of the frons produced anteriorly into a frontal ledge overhanging antennal radicle. Vertex strongly convex between eye tops (Fig. 5). Upper frons gently convex; half of MID 1.65 × eye width in frontal view; frontal line indistinguishable above, sharply impressed below. Inner orbits convergent above and slightly convergent below. UID : MID : LID = 50 : 59 : 55. Ocelli large, slightly raised. Ocellar triangle acute-angled (Fig. 6). POD : OOD = 0.65. Occipital margin straight

(Fig. 6). Gena in dorsal view strongly receding posteriorly, in profile its width 0.55 × eye width medially, broadest below middle. Clypeus width 2.6 × its length; lateral angle broadly rounded; apical rim feebly depressed, impunctate but alutaceous; apical margin straight. Apical margin of labrum straight medially. Mandibles normal. Antenna short, stout, and thickened toward the middle of flagellum. Flagellomere 1 length 2.66 × its maximum width, and 0.48 × UID.

Mesosoma in dorsal view slender, its length 2.3 × its maximum width (Fig. 8). Pronotum with anterior declivity not distinctly differentiated from dorsum (Fig. 7); lateral margin weakly and gradually convergent anteriorly; shoulder broadly rounded; junction between dorsal and lateral faces broadly rounded, not carinate; posterior margin as whole arcuate but subangulate at middle. Mesoscutum slightly raised anteromedially; posterolateral margin reflexed; parapsidal line impressed. Discs of scutellum and metanotum evenly flattened, raised on same level like mesoscutum and propodeum. Mesopleuron barely convex, if seeing mesosoma in dorsal view (Fig. 8). Propodeum strongly convex; posterior declivity rather flattened; median line finely impressed; posterior declivity with several very short erect white setae in addition to pubescence laterally.

Fore wing (Fig. 3) with SMC 2 receiving crossvein *1m-cu* at basal 0.53; SMC3 length 1.2 × SMC2 length on vein *M*, 0.6 × on vein *Rs*, narrowed on vein *Rs* by 0.39 × its length on vein *M*, receiving crossvein *2m-cu* at basal 0.4. Crossvein *2m-cu* barely curved posteriorly. Crossvein *3rs-m* indistinctly sinuate. Crossvein *cu-a* originating little posteriorly to fork of *M+CuA*. Hind wing (Fig. 4).

T1 not petiolate but with short parallel-sided basal portion. S1 not rugulose, but punctate (Fig. 9). S2 with nearly straight transverse groove (Fig. 9). S6 not carinate.

Tarsal claws dentate, with small preapical tooth.

MALE. Unknown.

DISTRIBUTION. North-eastern India (Arunachal Pradesh).

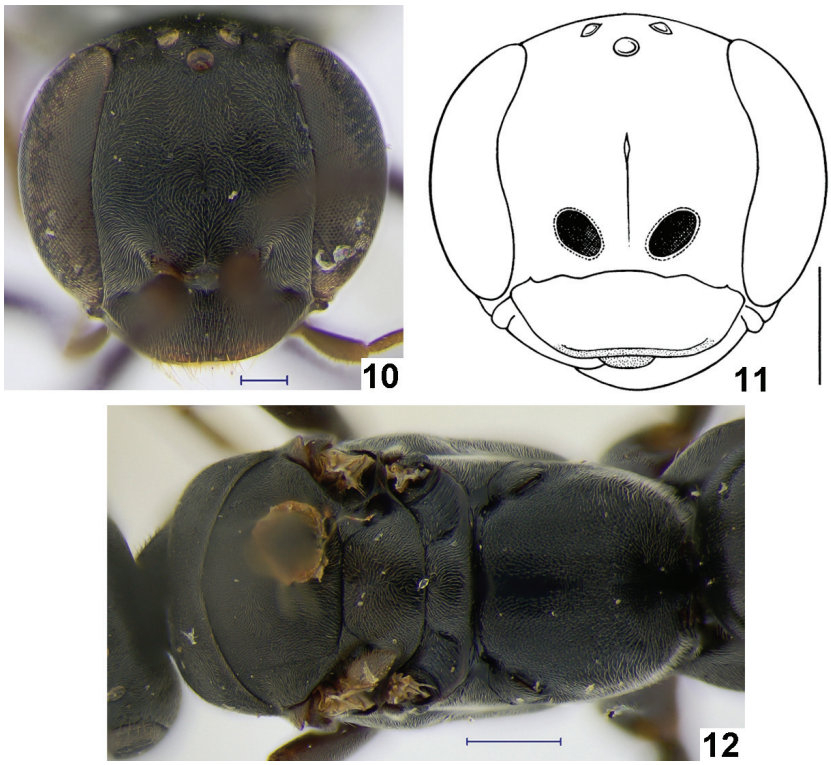
ETYMOLOGY. The new species is named after India, the country, in the north-east part of which, the holotype was collected. Treats as an adjective in opposition.

REMARKS. The new species belongs to the *Nipponodipogon iwatai* species-group, females of which have outer apicoventral corner of the metafemur rounded and T1 not petiolate basally. The new species runs to *Nipponodipogon iwatai* (Ishikawa, 1965), couplet 5 of the key in Loktionov *et al*. (2017).

DISCUSSION

The new species belongs to the genus *Nipponodipogon* Ishikawa, 1965 based on the female having the following set of characters: the maxillary cardo with a few thin, light brown bristles, the apex of those not extending beyond the maxillary lacinia; the antenna short, stout, and thickened toward the middle of the flagellum (fusiform); flagellomere 1 length less than 3.0 × its width; the supra-antennal area of the frons produced anteriorly into a frontal ledge overhanging the antennal radicle (Shimizu *et al*. 2015).

Nipponodipogon indicus **sp. n.** represents the new westernmost distribution record of this genus (North-Eastern India, the Eastern Himalaya region). It is a fourth species distributed in the Oriental Region, and eleven species of the genus in total. Like other congeners, known from a tropical area, the new species occurs in mountain forests at altitudes up to 1500 m.



Figs 10–12. *Nipponodipogon iwatai* (Ishikawa), female. 10, 12 – specimen from Japan, Fukui Pref.; 11 – holotype (from: Shimizu *et al*., 2015). 10, 11 – head, frontal view; 12 – mesosoma, dorsal view. Scale bar 0.2 mm for 10, 0.5 mm for 11, 12.

The female of this new species is closely related to that of *Nipponodipogon iwatai* (Ishikawa, 1965) in having the following characters: outer apicoventral corner of the metafemur rounded; the transverse groove on S2 nearly straight (Fig. 9), and T1 with a distinct parallel-sided portion basally. Both species can be easily separated from each other by the following characters: the vertex strongly convex between eye tops in *N. indicus* **sp. n**. (Fig. 5) *vs* moderately convex in *N. iwatai* (Figs 10, 11); the mesosoma in dorsal view slender, its length 2.3 × its maximum width in *N. indicus* **sp. n**. (Fig. 8) *vs* noticeably widened medially, 1.8 × in *N. iwatai* (Fig. 12).

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