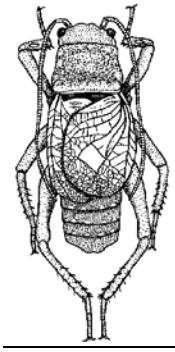

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TO THE KNOWLEDGE OF GENUS *NIPPONODIPOGON* ISHIKAWA, 1965 (HYMENOPTERA: POMPILIDAE, PEPSINAE) FROM LAOS

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Summary. *Nipponodipogon gusenleitnerorum* Loktionov et Lelej **sp. n.** is described and illustrated from Northern Laos (Phongsaly Province). The genus *Nipponodipogon* Ishikawa, 1965 and *N. shimizui* Loktionov, Lelej et Xu, 2017 are newly recorded from Laos.

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

В. М. Локтионов, А. С. Лелей. К познанию рода *Nipponodipogon* Ishikawa, 1965 (Hymenoptera: Pompilidae, Pepsinae) из Лаоса // Дальневосточный энтомолог. 2018. N 363. С. 1-7.

Резюме. Из Северного Лаоса (провинция Пхонгсали) описан и проиллюстрирован новый для науки вид *Nipponodipogon gusenleitnerorum* Loktionov et Lelej, **sp. n.** Род *Nipponodipogon* Ishikawa, 1965 и *N. shimizui* Loktionov, Lelej et Xu, 2017 впервые указываются для фауны Лаоса.

INTRODUCTION

The East Asian genus *Nipponodipogon* Ishikawa, 1965 (Pompilidae: Pepsinae, Deuterageniini) is distributed from the south of the Russian Far East (Amur Prov., Primorskij Terr., Kuril Islands: Kunashir) and Hokkaido in the north (Shimizu *et al*., 2015; Kochetkov, 2017; Loktionov & Lelej, 2017) to China (Yunnan and Hainan) and Kyushu in the south (Shimizu *et al*., 2015; Loktionov *et al*., 2017). Currently the genus consists of ten species, including new one described below from Laos. The revision, biology and distribution of the species were given in Shimizu *et al.* (2015) and descriptions of two species from China see Loktionov *et al.* (2017). Here *Nipponodipogon* is newly recorded from Laos.

MATERIAL AND METHODS

The holotype and some paratypes of the new species as well as other examined material are deposited in the Biologiezentrum des Oberösterreichischen Landesmuseums, Linz, Austria [OLL], one paratype is kept in the Federal Scientific Center of East Asia Terrestrial Biodiversity (formerly Institute of Biology and Soil Science), Vladivostok, Russia [IBSS].

Next abbreviations are used in the text: F, S and T are used for flagellomeres, metasomal sterna and terga respectively; POD – postocellar (interocellar) distance between posterior ocelli which is measured from above; OOD – ocellocular distance between posterior ocellus and compound eye which is measured from above; UID – upper interocular distance; MID – middle interocular distance; LID – lower interocular distance.

Photographs were taken with the stereomicroscope Olympus SZX16 and digital camera Olympus DP74, and stacked using CombineZM (Hadley 2008). The final illustrations were post-processed for contrast and brightness using Adobe® Photoshop® software.

TAXONOMY

Genus *Nipponodipogon* Ishikawa, 1965

Dipogon (*Nipponodipogon*) Ishikawa, 1965: 89. Type species: *Dipogon* (*Nipponodipogon*) *iwatai* Ishikawa 1965, ♀, Japan: Honshu, by original designation.

Nipponodipogon: Lelej & Loktionov, 2012: 11; Loktionov & Lelej, 2014: 153; Shimizu *et al.*, 2015: 498; Loktionov & Lelej, 2017: 26; Loktionov *et al*., 2017: 105; Kochetkov, 2017: 73; Lelej & Loktionov, 2017: 164.

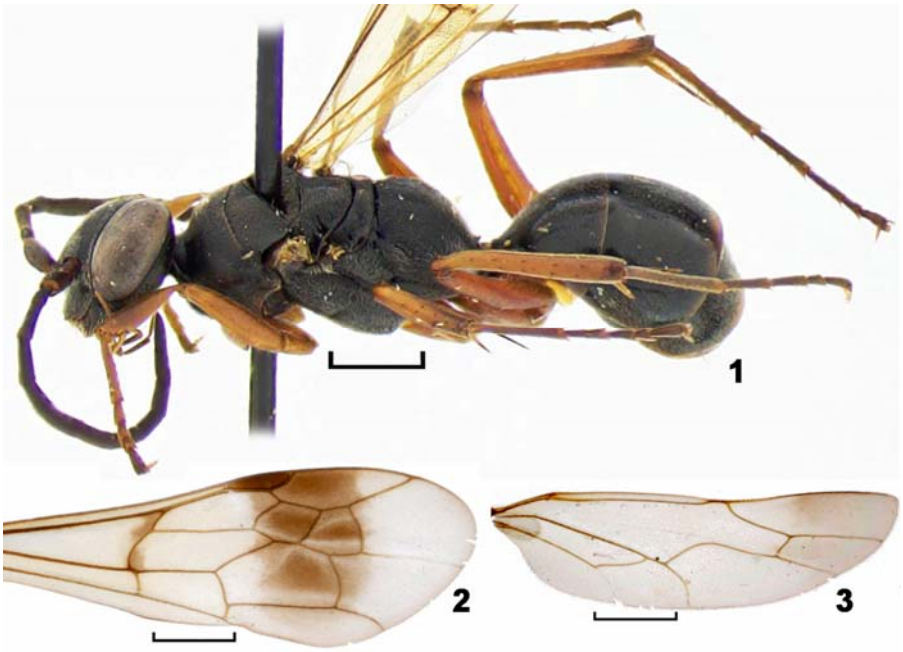
SPECIES INCLUDED. Ten species, including new one described below.

DISTRIBUTION. Palaearctic Region: Russia (Amur Prov., Primorskij Terr., Kuril Islands: Kunashir), Japan (Hokkaido, Honshu, Kyushu); Oriental Region: China (Guangdong, Hainan, Yunnan), Laos (new record).

***Nipponodipogon gusenleitnerorum* Loktionov et Lelej, sp. n.**
Figs 1–9

TYPE MATERIAL. Holotype – ♀, **Laos:** Phongsaly Prov., Phongsaly Env., 21°41'N, 102°6'E, 1500 m, 6–17.V 2004 (Vít Kubáň) [OLL]. Paratypes – **Laos:** Phongsaly Prov., Phongsaly Env., 21°41'N, 102°6'E, 1500 m, 6–17.V 2004, 3 ♀ (Vít Kubáň) [OLL]; **Laos:** Phongsaly Prov., Phongsaly Env., 21°41'N, 102°6'E, 1500 m, 28.V–20.VI 2003, 1 ♀ (Vít Kubáň) [IBSS].

DIAGNOSIS. FEMALE. Outer apicoventral corner of metafemur produced triangularly. T1 with long petiole basally (Fig. 8). Propodeum without groove anteromedially, with coarse transverse rugae media- and posterolaterally (Figs 6, 8). Fore wing vein *r* long, 0.35–0.45 times as long as Rs_3 (Fig. 2). Mesosoma completely black (Fig. 1). MALE. Unknown.



Figs 1–3. *Nipponodipogon gusenleitnerorum* Loktionov et Lelej, sp. n., holotype, female. 1 – habitus, dorso-lateral view; 2 – fore wing; 3 – hind wing. Scale bar: 1 mm.

DESCRIPTION. FEMALE. Body length 6.5–7.7 mm; fore wing length 5.9–7.0 mm. Head, mesosoma and metasoma black (Fig. 1); mandibles brownish; antenna black, except F3–F10 muddy yellow ventrally. Legs yellowish-brown with tibiae apically and tarsi darker. Fore wing barely infuscate, with two distinct fuscous bands (Fig. 2). Hind wing barely infuscate, with somewhat darker apical portion (Fig. 3).

Head and mesosoma matt. Frons, vertex, and mesosoma, except propodeum, finely and densely punctate. Pronotum finely striate laterally. Mesopleuron coarser punctate than frons. Upper mesopleuron and metapleuron finely and densely striate. Disc of metanotum punctate, sometimes with oblique longitudinal or transverse fine

Figs 4–9. *Nipponodipogon gusenleitnerorum* Loktionov et Lelej, sp. n., holotype, female. 4 – head, frontal view; 5 – head, dorsal view; 6 – metapostnotum and propodeum, dorsal view; 7 – head, lateral view; 8 – mesoscutellum, metanotum, metapostnotum, propodeum and T1, dorsal view; 9 – metaclaws.

striae. Lateral side of metanotum with several regular oblique striae. Propodeum coarsely and densely punctate anteriorly, with fine transverse rugae posteriorly and much coarse rugae media- and posterolaterally (Figs 6, 8); with indistinct longitudinal groove anteromedially (Figs 6, 8). Metasoma somewhat polished (Fig. 8). T1–T5 with very fine punctures; T6 and S6 less polished than other segments, with scattered setiferous pores located on all exposed portion; S1–S5 with somewhat larger punctures than on T1–T5. S1 with several longitudinal rugae anteriorly. Transverse groove on S2 well impressed and gently arcuate.

Body with gray pubescence mostly short, but longer on propodeum posterolaterally. Body without setae except following: upper frons with one long erect setae and a few shorter ones; clypeus with a few long suberect setae anteriorly; mandible with long and stout setae; S2–S5 with scattered short erect setae posteriorly; T6 and S6 with denser long erect pale setae.

Head in frontal view 1.1–1.2 times as wide as height (Fig. 4). Vertex slightly convex between eye tops (Fig. 4). Upper frons slightly convex in profile (Fig. 7). Frons with median line (Fig. 5). Supra-antennal area of frons produced anteriorly into frontal ledge overhanging antennal radicle (Fig. 7). Inner orbits slightly convergent above and subparallel below (Fig. 4). Half of MID 1.3–1.4 times as long as eye width. Ocelli large, slightly raised; ocellar triangle acute-angled (Fig. 5); POD/OOD = 0.70–0.85. Posterior margin of vertex in dorsal view barely concave medially (Fig. 5). Gena in dorsal view slightly developed (Fig. 5). Clypeus convex medially, with distinct concavity basolaterally; anterolateral corner broadly rounded; anterior margin barely emarginate medially; 2.7–2.9 times as wide as height. Apical margin of labrum broadly rounded. Mandible with two subapical teeth. Maxillary cardo with two tufts of thin and pale bristles. Malar space short. Gena noticeably narrowing towards vertex (Fig. 7). Antenna short, stout, and thickened toward middle of flagellum; F1–F3 distinctly widening toward apex; apex of apical flagellomere pointed; F1 0.95–1.0 times as long as F2; F1 2.6–2.8 times as long as width and 0.65–0.70 times as long as UID.

Pronotum with anterior declivity flattened and somewhat concave, not distinctly differentiated from dorsum; dorsum in dorsal view slightly narrowing anteriorly; shoulder not swollen, but gently rounded; juncture between dorsal and lateral faces narrowly and roundly raised; posterior margin barely arcuately emarginate medially. Mesoscutum evenly and barely convex with posterolateral rim not raised; parapsidal sulcus distinctly impressed. Discs of mesoscutellum and metanotum hardly raised above level of mesoscutum and propodeum. Metapostnotum narrow and practically linear, deeply sunken between metanotum and propodeum (Fig. 6). Propodeum evenly convex with flattened posterior declivity not well differentiated from dorsum.

Fore wing (Fig. 2) with *r* 0.35–0.45 times as long as Rs_3. SMC2 receiving crossvein *1m-cu* at basal 0.4–0.5. SMC3 1.1–1.3 times as long as SMC2 on vein *M*, and 0.7–0.9 on vein *Rs*, receiving crossvein *2m-cu* at basal 0.54–0.55. Crossvein *2rs-m* straight or sometimes hardly curved; crossvein *3rs-m* barely curved; crossvein *cu-a* barely postfurcal. Hind wing (Fig. 3). Outer apicoventral corner of metafemur produced triangularly. Claws symmetrical with large subapical inner tooth (Fig. 9). T1 distinctly petiolate (Fig. 8). S6 with longitudinal median rounded carina posteriorly.

MALE. Unknown.

DISTRIBUTION. Laos.

ETYMOLOGY. It is a pleasure for us to name the new species after well-known entomologists, Josef Gusenleitner and his son Fritz Gusenleitner (Biologiezentrum des Oberösterreichischen Landesmuseums, Linz, Austria).

REMARKS. The female of new species is closely related to that of *Nipponodipogon orientalis* Loktionov, Lelej et Xu, 2017 in having propodeum with coarse transverse rugae posterolaterally (Figs 6, 8), outer apicoventral corner of metafemur produced triangularly and T1 petiolate basally. But it can be easily distinguished by the following characters: mesosoma completely black (Fig. 1) (completely yellow orange in *N. orientalis*); disc of propodeum with indistinct groove anteromedially (Figs 6, 8) (with distinct groove in *N. orientalis*); F1 2.6–2.8 times as long as width (2.2–2.4 times in *N. orientalis*); fore wing vein *r* long, 0.35–0.45 times as long as Rs_3 (Fig. 2) (short, 0.15–0.27 times in *N. orientalis*).

Nipponodipogon shimizui Loktionov, Lelej et Xu, 2017

Nipponodipogon shimizui Loktionov, Lelej & Xu, 2017: 114, 123, 125, ♀ ♂. Holotype, ♀, China, Guangdong, Nanling, 8–17.VIII 2010 (Hua-yan Chen), deposited in the South China Agricultural University, Guangzhou, China.

MATERIAL EXAMINED. **Laos**: Louang Phrabang Prov., 5 km W Ban Song-Cha, 20°33'N, 102°14'E, 1200 m, 24.IV–16.V.1999, 1 ♂ (Vít Kubáň) [OLL].

DIAGNOSIS. FEMALE. Outer apicoventral corner of metafemur produced triangularly. T1 with distinct petiole basally. Crossvein *2rs-m* almost straight or sometimes barely curved; crossvein *3rs-m* straight or almost straight. Mesoscutum raised along midline. Head and mesosoma matt; metasoma somewhat polished. MALE. T1 distinctly petiolate basally. F3–F11 not produced triangularly beneath, not forming serrated profile. Propodeum polished, without any striae. Subbasal portion of hypopygium with angulate sublateral carina.

DISTRIBUTION. China (Guangdong, Yunnan) (Loktionov *et al*., 2017), Laos (new record).

DISCUSSION

Nipponodipogon gusenleitnerorum **sp. n.** is a third species of the genus described and distributed in the Oriental Region. Discovery of the new species and *N. shimizui* from Laos enlarges the distribution of the genus within the Oriental Region. Eventually, species from the genus *Nipponodipogon* may be found in neighbouring countries: Thailand, Vietnam and Cambodia.

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