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Mita, Toshiharu
Laboratory of Entomology, Faculty of Agriculture, Tokyo University of Agriculture

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Redescription of *Neodryinus japonicus* Uchida (Hymenoptera: Dryinidae: Gonatopodinae)

Toshiharu MITA

Laboratory of Entomology, Faculty of Agriculture, Tokyo University of Agriculture,
1737 Funako, Atsugi-shi, Kanagawa, JAPAN

Abstract. *Neodryinus japonicus* Uchida is redescribed based on the holotype which was currently rediscovered and female specimens collected in Honshu and Kyushu.

Key words: Holotype, parasitoid.

Introduction

In the world revision of the Dryinidae (Olmi, 1984), *Neodryinus japonicus* Uchida, 1927 was treated as a nomen dubium because the specimens including the type were not found and considered apparently lost. In the course of the taxonomic study of Dryinidae in Japan, I rediscovered the holotype of *N. japonicus*, and could examine additional female specimens from Honshu and Kyushu.

Materials & Methods

The terminology used in the text is that of Olmi (1984). The following abbreviations were used in the descriptions: POL, distance between the inner edges of the two lateral ocelli; OL, distance between the inner edges of a lateral ocellus and the median ocellus; OOL, distance from the outer edge of a lateral ocellus to the compound eye; OPL, distance from the posterior edge of a lateral ocellus to the occipital carina; T1–T5, tarsomere numbers of foreleg. The chela ratio is the ratio between the length of the projection (distal part of Olmi, 1984) of T5 and the entire length of T5.

The depository of the materials is surrounded by brackets and indicated after the label information. The following abbreviations were used for the institutions lending material: Entomological Laboratory, Kyushu University, Fukuoka, Japan (ELKU); Hokkaido University Museum, Sapporo, Japan (HUM); Osaka Museum of

Natural History, Osaka, Japan (OMNH); Tokyo University of Agriculture, Atsugi, Japan (TUA).

Genus *Neodryinus* R. Perkins, 1905

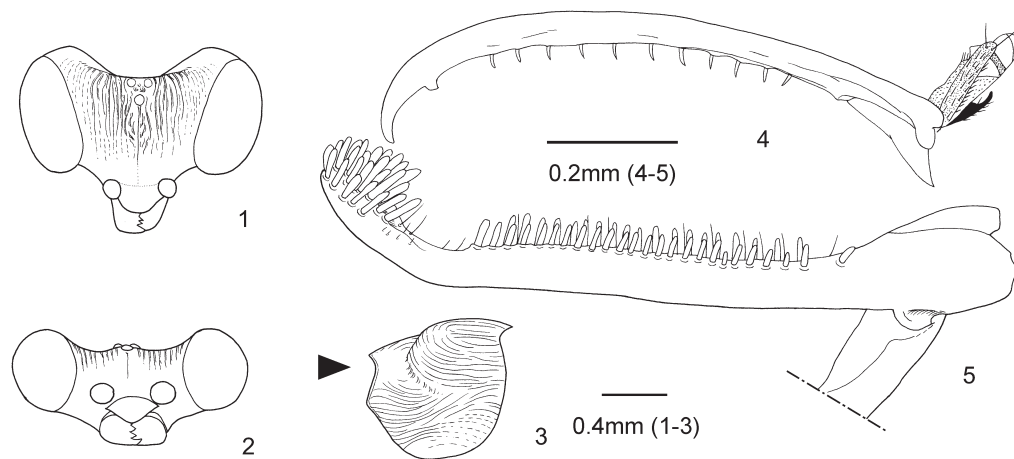
Type species: *Neodryinus koebelei* R. Perkins, 1905, original designation.

Neodryinus japonicus Uchida, 1927 (Figs. 1–6)

Neodryinus (sic) *japonicus* Uchida, 1927: 32; Esaki & Hashimoto, 1931: 30; Uye, 1934: 168 (male description). **Type locality:** Oita (Kyushu, Japan).

Neodryinus japonicus Uchida: Nishioka, 1980: 6; Olmi, 1984: 1812; Tadauchi, 1989: 650; Terayama, 2004: 9.

Redescription. Female (n = 4). Head (Figs. 1, 2) 0.61–0.64 × longer than wide, granulated and covered with silver setae on anterior part of frons and dorsal part of malar space, smooth on ventral surface of malar space, granulated and longitudinally striated on dorsal surface of frons, weakly granulated on gena, granulated on vertex; frons 0.37–0.46 × wider than head, strongly excavated (Fig. 2); frontal keel complete; subocular suture faintly present; OL = 2.0–3.0; POL = 2.0; OOL = 14.0–16.0; OPL = 0.0; ocelli forming a strongly acute triangle; posterior ocelli touching occipital carina; maximum diameter of anterior ocellus 2.0–3.0; temple strongly developed; frons and vertex excavated; occipital carina incomplete, present only between eyes; clypeus triangular; antenna clavate;



Figs. 1-5. *Neodryinus japonicus* Uchida. 1 Head in dorsal view; 2 ditto, frontal view; 3 pronotum in dorso-lateral view; 4 enlarged claw; 5 fifth tarsomere.

antennomeres in following proportions: 12.5–13.0; 7.0; 34.0–34.5; 22.0; 19.0–20.0; 13.0; 9.0; 7.5–8.0; 6.0; 9.0; first flagellomere $2.62\text{--}2.76 \times$ scape. Palpal formula 6/3. Eye large, with anterior margin located beyond anterior margin of frons in dorsal view.

Pronotum (Fig. 3) $1.08\text{--}1.12 \times$ longer than wide, mostly granulated and striated around anterior collar and disc, with smooth on narrow area anterior to transverse impression, with anterior transverse groove and strong transverse impression; anterior margin of anterior collar excavated (Fig. 3, arrow); posterior transverse impression absent; propleuron strongly granulated dorsally, slightly granulated ventrally; pronotal tubercle not reaching tegula. Scutum $1.70\text{--}1.77 \times$ width, $2.13\text{--}2.24 \times$ wider than minimum width, irregularly longitudinally rugose; notaulices complete, posteriorly separated but confused among rugosities. Five to seven deep scutellar pits present between scutum and scutellum. Scutellum granulated and reticulated on anterior surface, granulated on posterior surface, flattened in lateral view. Epicnemium reticulate rugose. Mesepisternum reticulate rugose. Metanotum narrow, granulated, separated from scutellum and propodeum by a row of deep pits. Metapleural region striated and rugose. Propodeum $0.88\text{--}0.90 \times$ as long as wide, with one incomplete transverse carina located between two posterior longitudinal keels; dorsal surface $1.49\text{--}1.55 \times$ longer than posterior surface, irregularly longitudinally rugose; posterior surface reticulate, with two longitudinal keels; lateral regions reticulate rugose; median region reticulate rugose on dorsal half, irregularly transversely rugose on ventral half.

Foreleg chelate (Figs. 4, 5); protarsal segments in

following proportions: 110–115; 18–20; 43–44; 146–152; 222–226; T1 $0.75\text{--}0.76 \times$ T4; T3 producing into hook; chela ratio = $0.85\text{--}0.87$. Inner margin of T5 bearing one basally separated lamella and two rows of $19 + 24$ lamellae, in addition to one basally separated bristle and one row of eight bristles; distal apex curved, bearing ca. 25 lamellae and two bristles. Enlarged claw curved, distally tapering; inner margin bearing one acute bidentate subapical tooth and one row of 11 lamellae. Mesocoxa granulated. Metacoxa roughly granulated. Forewing with two dark transversal bands (Fig. 6). Radial vein forming distinct corner indicated by short tubular 2rm vein; distal part reaching distal apex of wing, $3.4\text{--}3.9 \times$ longer than proximal part.

Metasoma oval; hypopygium smooth with distal apex entirely covered with sparse erected setae.

Color. Head black excluding outer margin of clypeus testaceous; mandible black on basal half, testaceous on apical half, with brown teeth; antenna brownish testaceous, excluding dorsal surface of scape brown; ventral surface of scape whitish testaceous; F8 brown; mesosoma black excluding outer margin of pronotum brown; tegula brownish black; legs entirely reddish black excluding fore coxa brownish testaceous with dark spot; fore trochanter brown testaceous with dark basal margin and distal dark spot; tibiae testaceous to brown; meso- and metacoxa black; mesofemur dark reddish brown; metafemur dark reddish brown with dark spot; forewing hyaline with two dark bands; metasoma brownish black.

Measurements (in mm). Head $0.86\text{--}0.92$ long, $1.40\text{--}1.43$ wide; antenna $3.77\text{--}3.81$; eye 0.68 long, 0.30 wide in dorsal view; mesosoma $2.80\text{--}3.04$; pronotum $0.85\text{--}0.86$



Fig. 6. General habitus of *Neodryinus japonicus* Uchida.

long, 0.77–0.79 wide; scutum 0.48–0.50 long, 0.85 wide; scutellum 0.25 long; fore coxa 0.97–1.02; fore trochanter 1.00–1.02; fore femur 1.76–1.78; fore tibia 1.57–1.58; T5 1.11–1.13; forewing 3.44–3.64; metasoma 1.70–1.80; total body length 5.42–5.70.

Male. Although male was described by Uye (1934), the only specimen examined by that author seems to be lost. It is poorly characterized in the original description and no diagnostic character of the male is available.

Material examined. Holotype: [JAPAN] ♀, (first label) “Japan T. Uchida”, (backside of first label written in Japanese) “Oita, Ue Tenji”, (second red label) “Type Matsumura”, “*Dryinus nipponicus* sp. n.” (HUM). Further specimens examined: [JAPAN] 1♀, Misugicho, Tsu-shi, Mie, 1821. IV. 2011, T. Shimada leg. (TUA); 1♀, Yatacho, Yamatokoriyama-shi, Nara, 3. V. 2008, collected as cocoon on deciduous tree leaf, R. Matsumoto leg. (ONHM); 1♀, Ushinotoge, Nichinan-shi, Miyazaki, 17. V. 2007, Y. Nakase leg. (ELKU).

Distribution. Japan (Honshu, Kyushu).

Hosts. Unknown.

Remarks. The cocoons of this species were found on a leaf of some tree in an evergreen forest (Uye, 1934). It suggests that they parasitize arboreal fulgoromorphan host.

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