

Neodryinus isoneurus Xu & He, 1997 (Hymenoptera: Dryinidae) new to Japan

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Abstract *Neodryinus isoneurus* Xu & He, 1997 is newly recorded from Japan based on a female collected in Mie Prefecture, Honshu.

The genus *Neodryinus* Perkins, 1905 (Dryinidae: Gonatopodinae) is distributed mainly in the tropics to subtropics, and it is rare in the Palearctic region. Hitherto, *N. japonicus* Uchida, 1927 has been known from Japan (Mita, 2013; Olmi & Xu, 2015) and a North American species, *N. typhlocybae* (Ashmead, 1893) was introduced into Europa in order to control the citrus flatid planthopper, *Metcalfa pruinosa* (Say, 1830) (Flatidae) (Olmi, 1999). Compared to the other genera of the Eastern Palearctic Gonatopodinae,

Neodryinus can be distinguished by fully developed wing and tibial spur formula 1/0/2 in the female; occipital carina absent or only shortly present behind ocellar triangle and lack of temple in the male.

In the course of the insect monitoring project conducted by the Mie Prefectural Museum (Tsu, Japan), an unknown female of *Neodryinus* was collected. Morphological characters of this specimen match those of *N. isoneurus* Xu & He, 1997 described from the Oriental China (Yunnan) (Xu & He, 1997; Xu *et al.*, 2013). In the present study, first photo images of



Figs. 1–4. *Neodryinus isoneurus*, female (Japan). 1, General habitus; 2, head, dorsal view; 3, pronotum and mesoscutum, dorsal view; 4, chela. Scale represents 2.0 mm (1), 0.5 mm (2, 3), 0.25 mm (4), respectively.

N. isoneurus are illustrated and a new key to species of the Palaearctic *Neodryinus* is provided.

***Neodryinus isoneurus* Xu & He, 1997**
(Japanese name: Momoaka-hosokubi-kamabachi)
(Figs. 1–4)

Neodryinus isoneurus Xu & He, 1997: 414; He & Xu, 2002: 293; Xu *et al.*, 2011: 9; 2013: 323.

Specimen examined. 1♀, JAPAN, Mie Pref., Tsu-shi, Isshinden-Kodubeta, Mie Prefectural Museum, 9. IX. 2017, N. Tsuji leg. (deposited in Mie Prefectural Museum).

Diagnosis. Female. Body length 5.4–6.0 mm. Head and mesosoma black; antenna apically brownish, legs reddish (Fig. 1) to brown-reddish except tibiae black, tarsi black to brown; forewing with two dark transverse bands; metasoma black to brownish black except ventral side brownish; occipital carina present only behind ocellar region (Fig. 2); mesoscutum granulated with or without irregular keels anteriorly (Fig. 3); notauli present, extending to approximately half as long as mesoscutum (Fig. 3); segment 5 of protarsus with more than 20 medial lamellae; enlarged claw with 6–10 bristles or lamellae (Fig. 4); subapical tooth located close to apex. Male. Unknown.

Distribution. China (Yunnan); Japan (Honshu), new record.

Notes. The female was collected from a branch of *Neolitsea sericea* (Blume) Koidz. According to the original description, the female from Japan differs from the holotype as follows: legs (Fig. 1) more reddish (brown-reddish in the holotype); anterior part of mesoscutum (Fig. 3) with irregular keels (granulated); enlarged claw (Fig. 4) bearing 10 lamellae (6 bristles). Although other morphological characters are substantially the same, the difference in the enlarged claw (bearing lamellae, not bristles) is uncommon in species of *Neodryinus*. Further study is needed to evaluate these differences.

Key to species of Palaearctic *Neodryinus*

1. Head almost flat, shiny, granulated and slightly rugose *N. typhlocybae* (Ashmead)
- Head distinctly excavated, with face sculptured by many parallel longitudinal keels 2
2. Occipital carina longer, laterally extending beyond 0.5 length of OOL; legs with femora black, tibiae paler, testaceous to brown (fig. 6 in Mita (2013)); enlarged claw with subapical tooth located far from distal apex *N. japonicus* Uchida
- Occipital carina shorter, present only behind ocellar triangle; legs with femora reddish to brown-reddish, tibiae black (Fig. 1); enlarged claw with subapical tooth located close to distal apex *N. isoneurus* Xu & He

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