Short Communication

A new record of the genus *Pseudocollinella* Duda (Diptera, Sphaeroceridae) from Japan

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Abstract: *Pseudocollinella* (*Setiopacifrons*) *digna* (Roháček, 1982) is recorded from Japan for the first time. *Pseudocollinella* (*Setiopacifrons*) *simplicisternum* Papp, 2016 is synonymized with *P. digna*. Two Japanese species of the genus are redescribed and illustrated for the comparison.

Key words: *Pseudocollinella* (*Setiopacifrons*) *digna* (Roháček, 1982), *Pseudocollinella* (*Setiopacifrons*) *japonica* Papp, 2016, Japan, new record, new synonymy, Sphaeroceridae

INTRODUCTION

The subgenus *Setiopacifrons* Papp of the genus *Pseudocollinella* Duda was described in 2016, including 17 species. According to Papp (2016), this subgenus is characterized from the other subgenera by the presence of 2 strong inner orbital setae and no presutural dorsocentral and acrostichal setae. In Japan, only one species, *Pseudocollinella* (*Setiopacifrons*) *japonica* was described from Kyushu based on one male specimen.

In the course of Japanese sphaerocerid study, I found 2 species of the genus *Pseudocollinella* (*Setiopacifrons*), and one of these is not recorded from Japan formerly. I record it in the present paper. *Pseudocollinella* (*S.*) *japonica* is also redescribed for the comparison. Male genital structures of both species are illustrated.

The specimens examined are preserved in the Reference Museum, Department of Medical Entomology, National Institute of Infectious Diseases, Tokyo.

TAXONOMY

Pseudocollinella* (*Setiopacifrons*) *digna (Roháček,
1982), comb. nov.
(Figs. 1, 3–5)
(Japanese name: Nisemigiwa-Funkobae)

Leptocera (*Opacifrons*) *digna* Roháček, 1982: 65
Opacifrons digna.—Marshall and Langstaff, 1998: 1–4,
26 (generic combination, phylogeny).
Pseudocollinella (*Setiopacifrons*) *simplicisternum* Papp,
2016: 48. **syn. n**

Redescription. Body length 1.5–2.1 mm.

Head: Generally dark brown, 4 *if*, foremost one weak; 2 distinct additional setae inside *ors*, *pvt* absent; eye oval, its longest diameter about 3.5 times as long as narrowest genal width; antenna dark brown; arista about 5 times as long as first flagellomere, long pubescent.

Thorax: Dark brown, brown microtomentose; 3 *dc*, about 6 rows of irregular *ac* microsetae in front of suture; prescutellar *ac* a little longer than microsetae; only one posterior *kepst* prominent; scutellum rounded triangular, somewhat wider than long, 2 *sctl*, apical *sctl* about 1.5 times as long as scutellum.

Wing (Fig. 1): Length about 1.75 mm, width about 0.80 mm, light brown, veins brown; costa ending at the end of R_{4+5} ; second costal sector a little longer than the third; R_{4+5} nearly straight, $r-m-dm-cu:dm-cu$ = about 2.5; halter with dark brown knob and brown stem.

Legs: Dark brown to brown; mid tibia with 2 *ad* setae on basal 1/4 and 4/5, 1 *d* seta on 6/7, and 2 *pd* setae on 1/3 and 4/5, ventrally with a row of short spines on apical 2/3.

Abdomen: Dark brown, brown microtomentose. Male. Sternite 5 (Fig. 3) with posteromedial pale area, which bears small excrescences; epandrium (Fig. 4) with short and sparse setae, surstylus (Fig. 4) consisting of 2 parts; fore part rather flat and posterior part with spine apically; inner genitalia as in Fig. 5, epiphallus large and prolonged ventrally, paramere bilobed, posterior lobe nearly truncate. Female cercus with 2 strong setae. Spermathecae globular.

Specimens examined. JAPAN: 1♂, 1♀, Enzan, Yamanashi, 3 Aug. 1983, T. Hayashi; 1♂, Lake Kawaguchi, Yamanashi, 9 Sept. 2005, T. Hayashi.

Figs. 1–2. Wings of *Pseudocollinella* (*Setiopacifrons*) spp. 1, *P. digna* (Roháček); 2, *P. japonica* Papp.

Figs. 3–8. *Pseudocollinella* (*Setiopacifrons*) spp.: 3, *P. digna*, male sternite 5; 4, ditto, male terminalia, lateral view; 5, ditto, inner genitalia; 6, *P. japonica*, male sternite 5; 7, ditto, male terminalia, lateral view; 8, ditto, inner genitalia.

TAIWAN: 9♂♂, 8♀♀, Wulai, Taipei Hsien, 29 Oct. 1985, K. Kanmiya; 2♀♀, Tienshiang, Hualien Hsien, 8 Nov. 1985, K. Kanmiya; 11♂♂, 11♀♀, Huanshan, Chichiawanchi, Taichung Hsien, 1 Nov. 1985, K. Kanmiya; 3♂♂, 2♀♀, Lushan, 1,000 m, Nantou Hsien, 24–25 July 1985, S. Shinonaga; 1♀, Lala shan, 1,600 m, Taoyuan Hsien, 26 Oct. 1985, R. Kano; 1♂, 2♀♀, Juisui, Hualien Hsien, 11 Nov. 1985, K. Kanmiya; 1♂, Lanhsu Is., Taitung Hsien, 17–19 July 1985, S. Shinonaga; 2♂♂, 1♀, Kenting Park, Pingtung Hsien, 18–19 Nov. 1985, K. Kanmiya.

Distribution. Bulgaria, Japan (Honshu) (**new record**), Taiwan.

Remarks. This species is originally described from Bulgaria based on one male specimen, and thereafter, it has not been recorded anywhere. Papp (2016) described *Pseudocollinella* (*Setiopacifrons*) *simplicisternum* Papp from Taiwan based on one male specimen, but its description and figures were undoubtedly equivalent to those of *P. digna* (Roháček). Therefore, I treat *P. simplicisternum* Papp as a junior synonym of this species. In the course of my study on Taiwanese sphaerocerid specimens, I found many specimens of this species and present now Taiwanese records in the present paper. This species is probably an endemic east Asian species, and the record from

Bulgaria shows this species is transferred from east Asia by human activity. Female was discovered for the first time.

Pseudocollinella (Setiopacifrons) japonica Papp, 2016
(Figs. 2, 6–8)

(Japanese name: Yamato-Nisemigiwa-Funkobae)

Pseudocollinella (Setiopacifrons) japonica Papp, 2016: 36

Redescription. Body length 0.8–0.9 mm. Wing (Fig. 2): Length about 1.55 mm, width about 0.65 mm, light brown, veins brown.

General structures are almost same as those of preceding species except for postabdominal structures: Male sternite 5 (Fig. 6) with 2 small posterior projections and posteromedial pale area, which has a prolonged thumb-like process; epandrium (Fig. 7) with rather long and dense setae, surstylus as in Fig. 7, paramere (Fig. 8) bilobed, posterior lobe prolonged and slender. Female cercus with 2 strong setae. Spermathecae elliptic.

Specimens examined. JAPAN: 1 ♀, Sapporo, Ishikari, Hokkaido, 13 June 1986, T. Hayashi; 1 ♂, Jozankei, Ishikari, Hokkaido, 2 Sept. 1995, T. Hayashi; 2 ♂♂, Nanae, Oshima, Hokkaido, 21 July 1982, T. Hayashi; 1 ♂, 2 ♀♀, Hatoyama, Saitama, 6 June 1996, T.

Hayashi; 1 ♂, Yona, Okinawa-honto Is., Okinawa, 2–6 Mar. 1994, T. Hayashi.

Distribution. Japan (Hokkaido, Honshu, Kyushu, Okinawa).

Remarks. This species is easily distinguishable from *P. digna* by the structure of male sternite 5, which has a characteristic posteromedial lobe. This species was formerly recorded only from Kyushu. Female was discovered for the first time.

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