Zootaxa 3878 (2): 196–200
www.mapress.com/zootaxa/

Correspondence

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.3878.2.6
http://zoobank.org/urn:lsid:zoobank.org:pub:17754A8F-462F-43F3-96CC-497A0CD77F24

A new species of *Xylota* Meigen (Diptera: Syrphidae) from the Far East

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Abstract

Xylota danieli Mutin & Ichige **spec. nov.** is proposed as the new name for *Xylota amamiensis* Shiraki sensu Mutin & Gilbert (1999), from the Russian Far East and Japan, which is described and figured. New synonymy is proposed for *Xylota coquilletti* Hervé-Bazin, 1914 (= *X. coquilletti amamiensis* Shiraki, 1968 **syn. nov.**; = *X. vulgaris* Yang & Cheng in Cheng & Yang, 1993 **syn. nov.**).

Key words: hover-flies, synonymy, taxonomy, Russia, Japan

Introduction

Hervé-Bazin (1914) proposed to use the name «*Xylota coquilletti*» for *Xylota cuprina* Coquillett, 1898 preoccupied by Bigot (1885). Coquillett (1898) described *X. cuprina* based on two males from Japan. Mutin & Gilbert (1999) revealed that these two specimens belong to different species of the genus *Xylota* Meigen. The paratype of *X. cuprina* belongs to the species whose male genitalia were drawn by Hippa (1978), as *X. coquilletti* Hervé-Bazin, 1914. For this species Mutin & Gilbert (1999) proposed use of the name *X. amamiensis* Shiraki, 1968. This species is widespread in East Asia. In various collections specimens of this species have been identified as «*Xylota coquilletti*». But Mutin & Gilbert (1999) did not investigate the identity of the holotype of *X. coquilletti amamiensis* Shiraki. More recently, Ichige examined the holotype of *X. coquilletti amamiensis* and found that it is identical with the holotype of *X. cuprina*. So, use of the name *X. amamiensis* cannot be maintained for the species represented by the paratype of *X. cuprina* examined by Mutin & Gilbert (1999). As a result we are describing it as a new species. We also establish new synonyms of *X. coquilletti*.

Results and discussion

Xylota coquilletti Hervé-Bazin, 1914

(figs 1–2, 4)

Xylota cuprina Coquillett, 1898: 327, ♂ holotype, "No 3999 USNM", "Japan Mitsukuri", [National Museum of Natural History, Washington DC], examined, nom. praeocc., nec Bigot (1885).

Xylota coquilletti Hervé-Bazin, 1914: 409, replacement name for *Xylota cuprina* Coquillett, 1898; Mutin & Gilbert (1999: 50, fig. 3); Mutin & Barkalov (1999: 492).

Xylota coquilletti amamiensis Shiraki, 1968: 122, ♂ holotype, "V-15-1953 Ryukyu Is. T. Shiraki", "*[Zelima] coquilletti amamiensis* v. nov. ♂ det. T. Shiraki" [National Institute for Agro-Environmental Sciences, Tsukuba, Japan], examined, **syn. nov.**

Xylota silvicola Mutin, 1988a: 103, ♂ holotype, «Ниж. Амур, р. Горин, верх. кл. Сиутару, 2.VII. [19]85, Мутин» (Russian Far East, Khabarovsky Krai, near Komsomolsk-na-Amure), [Zoological Institute, St. Petersburg], examined. Junior subjective synonym of *Xylota cuprina* Coquillett, 1898 according to Mutin & Gilbert (1999); Mutin, 1988b: 121, the repeated description. Junior primary homonym and objective synonym of *Xylota silvicola* Mutin, 1988a.

 Accepted by C. Kehlmaier: 7 Oct. 2014; published: 23 Oct. 2014

posterior row of 7–9 similar setae. Metatibia yellow on basal 2/5, with black setulae ventrally, and black on apical 3/5. Metatarsus entirely dark. **Wing.** Membrane hyaline, with brownish stigma; mainly microtrichose except for a small bare patch on the basal medial (bm) and posterior cubital (cup) cells, antero-basally. **Abdomen.** Visibly constricted in the middle, near connection between terga II and III. Tergum I usually black, tergum II black or dark brown, sometimes with a pair of diffuse reddish maculae; tergum III, as a rule, brown or reddish, usually paler basally; tergum IV brown or reddish, paler apically. Abdominal pile mainly pale except for areas of adpressed, very short, black pile on tergum II medially, tergum III postero-medially and tergum IV antero-medially. Sterna 7 and 8 pilose. Genitalia as in fig. 3. **Female.** Not reliably distinguishable from the related species *X. fo*.

Examined material. Holotype ♂, RUSSIA: Primorsky Krai, Bolshaya Ussurka river, Krutoy Yar village, 19.VI.1995, leg. V. Mutin, [Institute of Biology and Soil Science, Vladivostok, Russia (IBSS)]. Paratypes: RUSSIA: 11 ♂, same locality, 19–21.VI.1995, leg. V. Mutin, [6 ♂ IBSS; 5 ♂ Amurskii Humanitarian-Pedagogical State University (AmHPSU)]; 4 ♂, Primorsky Krai, 30 km N from Terney, Sichote-Alin reserve, 4.VIII.1982, leg. V. Mutin, [3 ♂ IBSS; ♂ AmHPSU]; ♂, Amurskaya Oblast, Malyi Khingan, Kundur, 19.VII.1988, leg. V. Makarkin, [IBSS]; ♂, Khabarovsky Krai, lower reaches of Gorin river, Tikhaya anabranch, 18.VI.1988, leg. V. Mutin, [AmHPSU], 4 ♂; Khabarovsky Krai, Pivan village, 19.–20.VI.1993, leg. V. Mutin, [AmHPSU]; ♂, same data except 20.VI.1992, [AmHPSU]; ♂, Bolshekhekhzyrsky reserve, environs of Bychikha village, 22.VI.1982, leg. V. Mutin, [AmHPSU]; ♂, Komsomolsk-na-Amure, Silinsky park, 31.VII.1996, leg. V. Mutin, [AmHPSU]; ♂, 25 km SW from Komsomolsk-na-Amure, environs of Molodezhny, 17.VII.1993, leg. V. Mutin, [AmHPSU]; JAPAN: 7♂, Hokkaido, Tomakomai C., Misawa, 21.VII.2006, leg. K. Ichige, [Katsuyoshi Ichige personal collection, (KIPC)]; ♂, Akita Pref., Ohmagari, 7.VI.1953, leg. N. Fukuhara, [National Institute for Agro-Environmental Sciences, Tsukuba, Japan (NIAES)]; ♂, Tochigi Pref., Nikko, 9.VIII.1953, leg. I. Hattori, [NIAES]; 2♂, Ibaraki Pref., Mt. Yamizo, 29.V.2007, leg. K. Ichige; 4♂, Ibaraki Pref., Gozen-yama, 2.V.2009, leg. K. Ichige, [KIPC]; ♂, Tokyo, Mt. Takao, 17.X.1965, leg. J. Minamikawa, [NIAES]; ♂, Gifu Pref., Takayama C., Hirayu, 3.VIII.2013, leg. K. Ichige, [KIPC]; ♂, Tokushima Pref., Mt. Nakatsumine, 20.VIII.1954, leg. M. Hirai, [NIAES]; ♂, Tsushima Is., Oboshiyama, 4.VIII.1974, leg. Y. Ikezaki, [NIAES]; 2 ♂, Ryukyu Is., Amami-Shinokawa, 11.V.1953, leg. T. Shiraki, [NIAES]; 2 ♂, Ryukyu Is., Amami-Oshima, Mt. Yuwan, 3.V.1953, leg. T. Shiraki, [NIAES].

Etymology. The specific name is dedicated to Daniel William Coquillett (1856–1911), the famous American dipterist.

Distribution. Russia: south of Khabarovsky Krai, Jewish Autonomous Oblast, south of Amurskaya Oblast, Primorsky Krai, Sakhalin Oblast, Japan: Hokkaido, Honshu, Shikoku, Kyushu, Ryukyu Islands.

Natural history. The larva is unknown. Feeding adults were observed on the inflorescences of *Senecio cannabifolius*; frequently adults collect pollen from the leaves of flowering plants. Males are associated with freshly sawn tree trunks. It is a common species of *Xylota* in the urban territories of the Russian Far East.

Acknowledgements

We are indebted to Arkady S. Lelej (Institute of Biology & Soil Science, Vladivostok, Russia) for help with production of the manuscript in its initial stages. We thank reviewers for critically reviewing the manuscript; Francis Gilbert (Nottingham University, UK) improving the English and Dr. Shin-ichi, Yoshimatsu (National Institute for Agro-Environmental Sciences, Tsukuba, Japan) for permission to study material in their collection. This work is carried out partly with the financial support of The Ministry of Education and Science of the Russian Federation, within the scope of the basic role of the State in the sphere of scientific activity.

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