

The Type Material of Japanese *Tenthredo* and *Macrophya* Sawflies
(Hymenoptera, Tenthredinidae) Described
by A. Mocsáry and R. Malaise

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Abstract The type material of 14 East Asian Tenthredinid sawfly species of the genera *Tenthredo* and *Macrophya* described by Mocsáry (1909) and Malaise (1931 a, 1931 b, 1938) is revised. Lectotypes are designated for 12 taxa. *Tenthredo minuta* Mocsáry, 1909 (= *Tenthredo dentina* Enslin, 1912) is a new junior synonym of *Tenthredo ferruginea* Schrank, 1776, and *Tenthredo trialbata* Malaise, 1931, is a new junior synonym of *Tenthredo contusa* Enslin, 1912 (= *T. lateralis* Mocsáry, 1909, nec Fabricius, 1779).

Key words: Tenthredinidae, *Tenthredo*, *Macrophya*, lectotype designation, new synonymy, A. Mocsáry, R. Malaise.

A Hungarian entomologist, Alexander Mocsáry described numerous new species of various hymenopteran groups, including sawflies from eastern Asia, from the 1870's to 1910's. René Malaise, a Swedish symphytologist and explorer well-known as the inventor of the "Malaise trap", greatly contributed to the sawfly taxonomy through his papers published in a period of four decades beginning in the early 1920's.

In the course of my revisional works on Japanese species of *Tenthredo* and *Macrophya*, I was able to examine type material of 14 species-group taxa described by Mocsáry (1909) and Malaise (1931 a, b, 1938) from Japan or from the Russian Far East and later recorded from Japan. For the species described in Mocsáry (1909) and Malaise (1931 a, b), the type specimens are all regarded as syntypes, because holotypes were not designated and the number of type specimens were not given. The primary purpose of the present work is to evaluate current interpretation of the treated taxa by studying the original type material and to designate lectotypes. In conclusion, I have confirmed that 12 of the 14 taxa have been correctly interpreted, established new synonymy for the other two taxa, and designated lectotypes for all the 12 taxa described by Mocsáry (1909) and Malaise (1931 a, b).

I wish to thank Mr. D. Notton, The Natural History Museum, London (BMNH), Dr. F. Ronquist, Swedish Museum of Natural History, Stockholm (NRMS), and Dr. L. Zombori, Hungarian Natural History Museum, Budapest (HNMB) for allowing me to study the material under their charge, and Dr. S.-I. Uéno, National Science Mu-

seum, Tokyo, for reviewing the manuscript. This work is supported in part by a grant from the Fujiwara Natural History Foundation.

***Macrophya sodalitia* Mocsáry**

Macrophya sodalitia Mocsáry, 1909, p. 16.

Current systematic position. A valid name for a subspecies of *Macrophya duodecimpunctata* (Linnaeus, 1758), *Macrophya duodecimpunctata sodalitia* Mocsáry, 1909.

Lectotype (hereby designated): ♀ labeled “Ussuri, Kasakewitsch, 1907, Korb”, “*Macrophya sodalitia*, det. Mocs.”, [red rectangular label with no letters], “*Macrophya sodalitia* Mocs.”, “Lectotype, *Macrophya sodalitia* Mocsáry, 1909, Det. A. Shinohara, 1997” [red] (HNMB). Right hindtarsus with apex missing; otherwise in good condition.

Paralectotypes: 2 ♀ labeled “Siberia or. Raddefka”, “*Macrophya sodalitia*, det. Mocs.”, [red rectangular label with no letters], “Paralectotype, *Macrophya sodalitia* Mocsáry, 1909, Det. A. Shinohara, 1997” [light blue] (HNMB).

Remarks. This taxon was described from the Russian Far East as a full species, but Enslin (1910) treated it as a synonym of “*Macrophya duodecimpunctata* var. *nigrina* Konow, 1898”, from Europe. Malaise (1931 a) pointed out that *nigrina* and *sodalitia* are distinguishable and used the name “*M. duodecimpunctata* L. var. *solitaria* Mocs”, where “*solitaria*” should be a lapsus calami for “*sodalitia*”. Takeuchi (1937 b) called it *Macrophya duodecimpunctata* var. *sodalitia* Mocsáry and Togashi (1975) first recorded it from Japan under the name of *Macrophya duodecimpunctata sodalitia* Mocsáry.

There are three syntypes of *Macrophya sodalitia* in the Hungarian Natural History Museum, Budapest, and I selected the best preserved specimen as the lectotype. The current interpretation of the taxon (e.g., Takeuchi, 1937 b) is correct.

***Macrophya falsifica* Mocsáry**

Macrophya falsifica Mocsáry, 1909, p. 17.

Current systematic position. A valid speceis, *Macrophya falsifica* Mocsáry, 1909.

Lectotype (hereby designated): ♀ labeled “Japan ex coll. Fruhstorfer”, “*Macrophya falsifica*, det. Mocs.”, [red rectangular label with no letters], “*Macrophya falsifica* Mocs.”, “Lectotype, *Macrophya falsifica* Mocsáry, 1909, Det. A. Shinohara, 1997” [red] (HNMB). Left hindfemur damaged at middle; otherwise in good condition.

Remarks. There is only one syntype of *Macrophya falsifica* in the Hungarian Natural History Museum, Budapest, which is herewith designated as the lectotype.

The current interpretation of the species (e.g., Takeuchi, 1937 b) is correct.

***Allantus ussuriensis* Mocsáry**

(Fig. 1)

Allantus ussuriensis Mocsáry, 1909, p. 22.

Current systematic position. A valid species, *Tenthredo ussuriensis* (Mocsáry, 1909).

Lectotype (hereby designated; Fig. 1): ♀ labeled “Ussuri, Kasakewitsch, 1907, Korb”, “*Allantus ussuriensis* Mocs. det.”, [red rectangular label with no letters], “Lectotype, *Allantus ussuriensis* Mocsáry, 1909, Det. A. Shinohara, 1997” [red] (HNMB). In excellent condition, except that the right flagellum is missing.

Paralectotype: 1 ♀ labeled “Ussuri, Kasakewitsch, 1907, Korb”, “*Allantus ussuriensis* Mocs. det.”, [red rectangular label with no letters], “*Allantus ussuriensis* Mocs.”, “Paralectotype, *Allantus ussuriensis* Mocsáry, 1909, Det. A. Shinohara, 1997” [light blue] (HNMB). The left forewing is missing and the abdomen and hind wings are detached and glued on a card pinned with the specimen.

Remarks. I have examined two syntypes of *A. ussuriensis* and selected the better preserved specimen as the lectotype.

This species was described from the Russian Far East and first recorded from Japan by Yano (1932) under the name of “*Tenthredo nigripectus* Matsumura”. Takeuchi (1937 a) pointed out that Yano’s (1932) “*Tenthredo nigripectus* Matsumura” was actually “*Tenthredo analis* (André, 1881)” on the basis of Japanese specimens identified by R. Malaise. After that work, this species was known as *Tenthredo analis* (André, 1881) in Japanese literature until Taeger (1988) pointed out that *T. ussuriensis* is the valid name for the species. *Tenthredo analis* (André, 1881) is a secondary junior homonym of *Tenthredo analis* Fabricius, 1793, a nomen dubium, and Enslin’s new name for it (*Tenthredo abjecta* Enslin, 1912) was published after Mocsáry’s (1909) paper (Taeger, 1988).

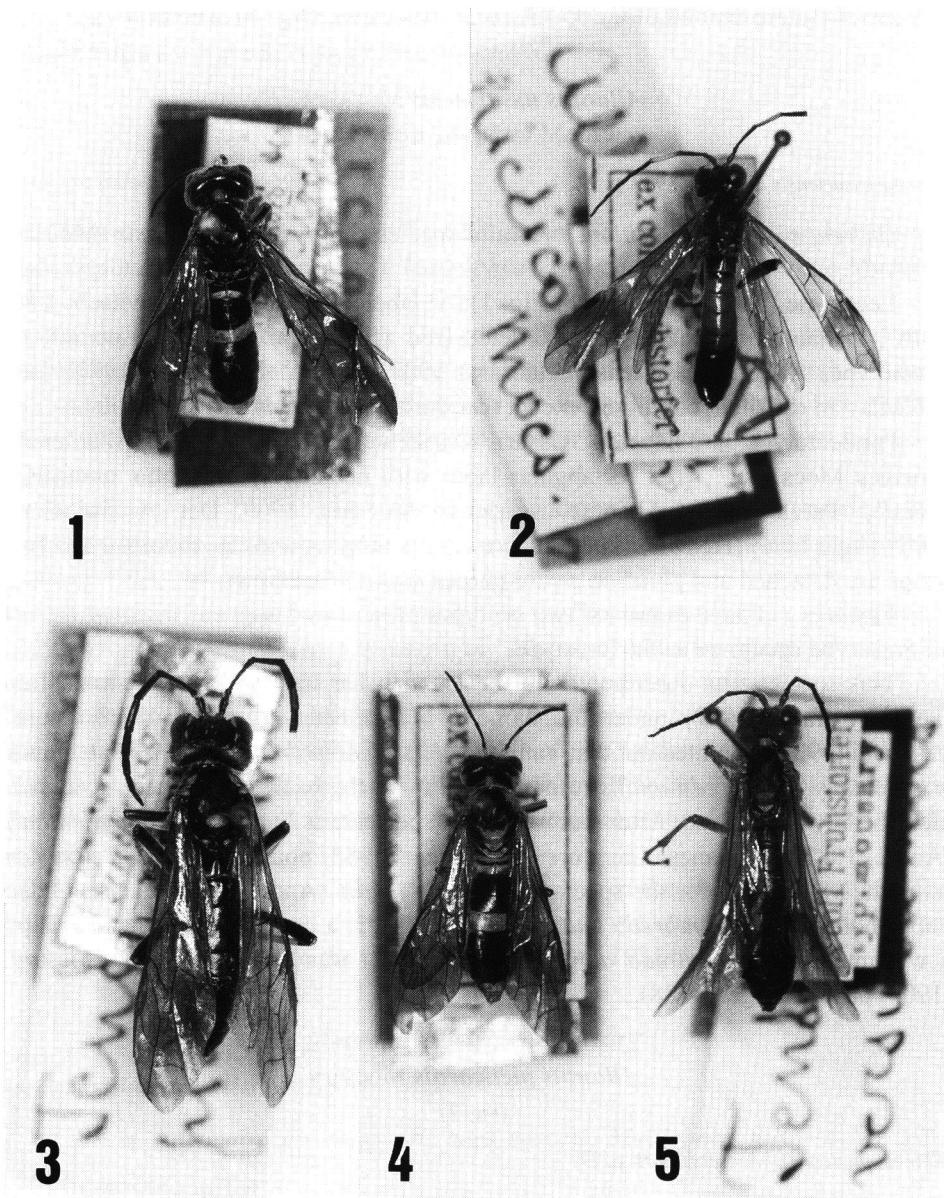
***Allantus picticornis* Mocsáry**

(Fig. 2)

Allantus picticornis Mocsáry, 1909, p. 27.

Current systematic position. A valid species, *Tenthredo picticornis* (Mocsáry, 1909).

Lectotype (hereby designated; Fig. 2): ♂ labeled “Japan ex coll. Fruhstorfer”, “*Allantus picticornis*, det. Mocsáry”, [red rectangular label with no letters], “*Allantus picticornis* Mocs.”, “Lectotype, *Allantus picticornis* Mocsáry, 1909, Det. A. Shinohara, 1997” [red] (HNMB). Three apical segments of the right antenna are missing,



Figs. 1–5. Lectotypes of five taxa described by Mocsáry. 1, *Allantus ussuriensis* Mocsáry, 1909 [= *Tenthredo ussuriensis* (Mocsáry, 1909)], ♀; 2, *Allantus picticornis* Mocsáry, 1909 [= *Tenthredo picticornis* (Mocsáry, 1909)], ♂; 3, *Allantus platycerus* Mocsáry, 1909 [= *Tenthredo platycera* (Mocsáry, 1909)], ♀; 4, *Allantus japonicus* Mocsáry, 1909 [= *Tenthredo japonica* (Mocsáry, 1909)], ♀; 5, *Tenthredo versuta* Mocsáry, 1909, ♀.

and the right midleg and right hind tibia and tarsus have been detached and glued to the label.

Remarks. In Mocsáry's collection, I found only one syntype, which is herewith designated as the lectotype. This is an uncommon but conspicuous species and has been correctly interpreted ever since the publication of its original description.

Allantus platycerus Mocsáry

(Fig. 3)

Allantus platycerus Mocsáry, 1909, p. 30.

Current systematic position. A valid species, *Tenthredo platycera* (Mocsáry, 1909).

Lectotype (hereby designated; Fig. 3): ♀ labeled "Japonia Yokohama", "platycerus Mocs. typ. det. Mocsáry", "Tenthredo platycera Mocs. typ. Mocsáry", [red rectangular label with no letters], "Tenthredo platycera Mocs.", "Lectotype, Allantus platycerus Mocsáry, 1909, Det. A. Shinohara, 1997" [red] (HNMB). Two apical segments of the right antenna and the right foreleg are missing, and the abdomen has been detached and repaired.

Remarks. The only syntype of this species preserved in the Hungarian Natural History Museum, Budapest, is hereby designated as the lectotype. This species was often referred to as *Tenthredo goliath* Enslin, 1920 (e.g., Takeuchi, 1952; Togashi, 1966; Abe & Togashi, 1989), but *T. platycera* is the valid name, as was discussed by Zombori (1974).

Allantus japonicus Mocsáry

(Fig. 4)

Allantus japonicus Mocsáry, 1909, p. 32.

Current systematic position. A valid species, *Tenthredo japonica* (Mocsáry, 1909).

Lectotype (hereby designated; Fig. 4): ♀ labeled "Japan ex coll. Fruhstorfer", "japonicus Mocs. typ. det. Mocsáry", "Allantus japonicus Mocs., det.", [red rectangular label with no letters], "Lectotype, Allantus japonicus Mocsáry, 1909, Det. A. Shinohara, 1997" [red] (HNMB). In good condition.

Paralectotype: 1 ♀ labeled "Japan ex coll. Fruhstorfer", "Allantus japonicus Mocs., det.", [red rectangular label with no letters], "Allantus japonicus Mocs.", "Paralectotype, Allantus japonicus Mocsáry, 1909, Det. A. Shinohara, 1997" [light blue] (HNMB). In good condition.

Remarks. I have examined two female syntypes, and selected one as the lectotype. The current interpretation of the species (e.g., Takeuchi, 1952) is correct.

***Tenthredo lateralis* Mocsáry**

Tenthredo lateralis Mocsáry, 1909, p. 34.

Current systematic position. *Tenthredo contusa* Enslin, 1912. *Tenthredo lateralis* Mocsáry, 1909, is a junior primary homonym of *Tenthredo lateralis* Fabricius, 1779, and Enslin (1912) gave a new name, *Tenthredo contusa* Enslin, 1912.

Lectotype (hereby designated): ♀ labeled “Siberia or. Raddefka”, “*Tenthredo lateralis* Mocs. typ. Mocsáry”, [red rectangular label with no letters], “*Tenthredo lateralis* Mocs.”, “Lectotype, *Tenthredo lateralis* Mocsáry, 1909, Det. A. Shinohara, 1997” [red], “*Tenthredo contusa* Enslin, Det. A. Shinohara, 1997” (HNMB). Left forewing missing, but otherwise in good condition.

Paralectotype: ♀ labeled “Siberia or. Raddefka”, “*Tenthredo lateralis* Mocs. typ. Mocsáry”, [red rectangular label with no letters], “Paralectotype, *Tenthredo lateralis* Mocsáry, 1909, Det. A. Shinohara, 1997” [light blue] (HNMB).

Remarks. This species was described from the Russian Far East and Takeuchi (1951) first recorded it from Japan under the name of “*Tenthredella trialbata* (Malaise, 1931)”. Since then, this species has been called either *Tenthredo trialbata* Malaise (e.g., Takeuchi, 1952) or *Tenthredo contusa* Enslin (e.g., Togashi, 1965) in Japanese literature; the two names are actually synonymous (see comments under *T. trialbata*), Enslin’s name having priority.

***Tenthredo versuta* Mocsáry**

(Fig. 5)

Tenthredo versuta Mocsáry, 1909, p. 35.

Current systematic position. A valid species, *Tenthredo versuta* Mocsáry, 1909.

Lectotype (hereby designated; Fig. 5): ♀ labeled “Japan ex coll. Fruhstorfer”, “*Tenthredo versuta* Mocs. typ. Mocsáry”, [red rectangular label with no letters], “*Tenthredo versuta* Mocs.”, “Lectotype, *Tenthredo versuta* Mocsáry, 1909, Det. A. Shinohara, 1997” [red] (HNMB). In good condition.

Remarks. The only syntype of this species preserved in the Hungarian Natural History Museum, Budapest, is hereby designated as the lectotype. The current interpretation of the species (e.g., Takeuchi, 1952) is correct.

***Tenthredo minuta* Mocsáry**

Tenthredo minuta Mocsáry, 1909, p. 37.

Current systematic position. A junior synonym of *Tenthredo ferruginea* Schrank, 1776. (*Tenthredo minuta* Mocsáry, 1909, nec Christ, 1791 = *Tenthredo denti-*

na Enslin, 1912 = *Tenthredo ferruginea* Schrank, 1776. **Syn. nov.**)

Lectotype (hereby designated): ♀ labeled “Siberia or. Raddefka”, “*Tenthredo minuta* Mocs. typ. Mocsáry”, [red rectangular label with no letters], “Lectotype, *Tenthredo minuta* Mocsáry, 1909, Det. A. Shinohara, 1997” [red] (HNMB). In good condition, but apex of left antenna missing and right forewing torn.

Paralectotype: 1 ♀ [? without abdomen] labeled “Siberia or. Raddefka”, “*Tenthredo minuta* Mocs. typ. Mocsáry”, [red rectangular label with no letters], “*Tenthredo minuta* Mocs.”, “Paralectotype, *Tenthredo minuta* Mocsáry, 1909, Det. A. Shinohara, 1997” [light blue] (HNMB).

Remarks. There are two syntypes in the Hungarian Natural History Museum, Budapest, and I have selected the better preserved specimen as the lectotype. This is a junior primary homonym of *Tenthredo minuta* Christ, 1791, and Enslin (1912) gave a new name, *Tenthredo dentina* Enslin, 1912. The lectotype (and the paralectotype) is a small, rather dark specimen of the widely distributed Eurasian species *Tenthredo ferruginea* Schrank.

The Japanese species so far known as *Tenthredo dentina* Enslin (e.g., Takeuchi, 1936, 1952) differs from the type series of *Tenthredo minuta* in having the lateral and ventral parts of mesothorax mostly reddish and the posterior margin of the seventh abdominal sternum (hypopygium) more deeply emarginate laterally. More study is needed to clarify the identity of this Japanese species.

Allantus hokkaidonis Malaise

(Fig. 6)

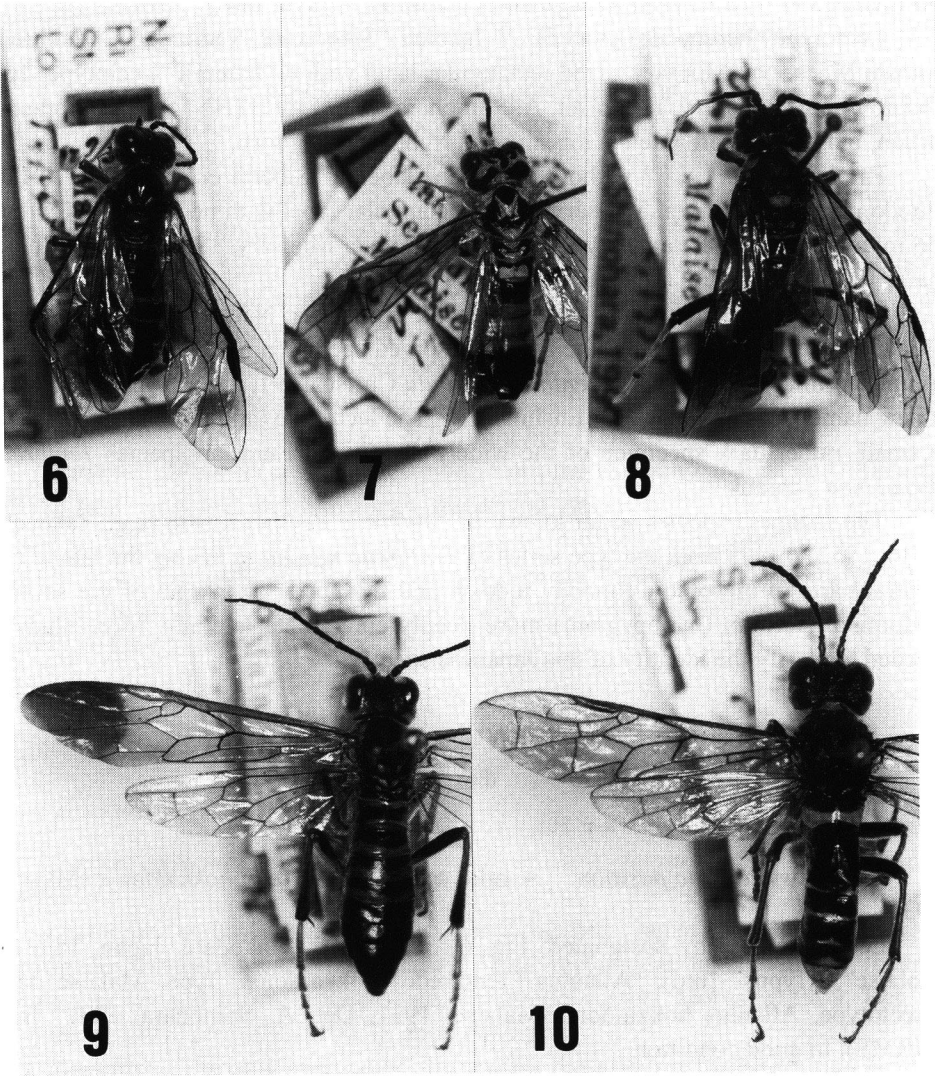
Allantus hokkaidonis Malaise, 1931 a, p. 201.

Current systematic position. A valid species, *Tenthredo hokkaidonis* (Malaise, 1931).

Lectotype (hereby designated; Fig. 6): ♀ labeled “Hakodate, Japan, 15/6 26, Malaise”, “Typus” [red], “*Allantus (Tenthredo) hokkaidonis*, Type, Malaise det.”, “Lectotype, *Allantus hokkaidonis* Malaise, 1931, Det. A. Shinohara, 1997” [red] (NRMS). In good condition.

Paralectotype: 1 ♂ labeled “Hakodate, Japan, 10/6, Malaise”, “Type ♂”, “*Allantus (Tenthredo) hokkaidonis*, allotype, Malaise det.”, “Allotypus” [red], “Paralectotype, *Allantus hokkaidonis* Malaise, 1931, Det. A. Shinohara, 1997” [light blue] (NRMS).

Remarks. This species was described on the basis of one female and one male. The female is hereby designated as the lectotype. The current interpretation of the species (e.g., Takeuchi, 1952) is correct.



Figs. 6–10. Lectotypes (6–8), paratype (9) and holotype (10) of five taxa described by Malaise. 6, *Allantus hokkaidonis* Malaise, 1931 [= *Tenthredo hokkaidonis* (Malaise, 1931)], ♀; 7, *Tenthredo vivida* Malaise, 1931 [= *Tenthredo eduardi* Enslin, 1920], ♀; 8, *Tenthredo trialbata* Malaise, 1931 [= *Tenthredo contusa* Enslin, 1912], ♀; 9, *Tenthredo basizonata* Malaise, 1938, ♀; 10, *Tenthredo grandiceps* Malaise, 1938 [= *Tenthredo longipennis* (Matsumura, 1912)], ♀.

Tenthredo vivida Malaise

(Fig. 7)

Tenthredo vivida Malaise, 1931 b, p. 108.

Current systematic position. A junior synonym of *Tenthredo eduardi* Enslin, 1920.

Lectotype (hereby designated; Fig. 7): ♀ labeled “1/8”, “Vladivostok, Sedanka, Malaise”, “Typus” [red], “*Tenthredo vividus* n. sp., Type, Malaise det.”, “Holotypus, *Tenthredo vivida* Mal., 1931, ♀, det. A. Taeger, 90” [red], “*Tenthredo eduardi* Ensl., det. A. Taeger, 1990”, “Lectotype, *Tenthredo vivida* Malaise, 1931, Det. A. Shinohara, 1997” [red] (NRMS). In good condition, except that the right antenna and left hind leg are detached and glued on a card pinned with the specimen, and apical segments of left mid tarsus and right hind tarsus are missing.

Paralectotype: 1 ♂ labeled “6/7”, “Vladivostok, Sedanka, Malaise”, “Type ♂”, “*Tenthredo vividus* n. sp., Malaise det.”, “Allotype” [red], “*Tenthredo eduardi* Ensl., ♂, det. A. Taeger, 1990”, “Paralectotype, *Tenthredo vivida* Malaise, 1931, Det. A. Shinohara, 1997” [light blue] (NRMS). Another female and another male paralectotypes (Malaise, 1931 b) have not been examined.

Remarks. This species has long been known in Japan as *Tenthredo vivida* Malaise ever since it was first recorded from this country by Takeuchi (1940). Taeger and Blank (1996) recently synonymized it with *Tenthredo eduardi* Enslin, 1920, a replacement name for *Tenthredella enslini* Forsius, 1918, a primary junior homonym of *Tenthredella enslini* Schirmer, 1913 (see Taeger & Blank, 1996, for more synonyms).

Tenthredo trialbata Malaise

(Fig. 8)

Tenthredo trialbata Malaise, 1931 b, p. 110.

Current systematic position. A junior synonym of *Tenthredo contusa* Enslin, 1912. (*Tenthredo lateralis* Mocsáry, 1909, nec Fabricius, 1779 = *Tenthredo contusa* Enslin, 1912 = *Tenthredo trialbata* Malaise, 1931 b. **Syn. nov.**)

Lectotype (hereby designated; Fig. 8): ♀ labeled “30/6”, “Vladivostok, Sedanka, Malaise”, “Typus” [red], “*Tenthredo trialbata*, Typus, Malaise det.”, “Lectotype, *Tenthredo trialbata* Malaise, 1931, Det. A. Shinohara, 1997” [red], “*Tenthredo contusa* Enslin, Det. A. Shinohara, 1997” (NRMS). Apices of the right foretarsus and left hindtarsus are missing, and most of the ventral surface and right side of the abdomen and part of the right midfemur have been consumed by insect pest.

Paralectotypes: 1 ♀ labeled “Kang.”, “Vladivostok, Tigrovaja, Malaise”, “*Tenthredo trialbata* n. sp., paratype, Malaise det. 1931”, “?84”, “K. Sato Collection, 1975”, “Paralectotype, *Tenthredo trialbata* Malaise, 1931, Det. A. Shinohara, 1997” [light blue] (NSMT); 1 ♀ labeled “Paratype”, “Vladivostok, Sedanka, Malaise”,

“*Tenthredo trialbata*, paratype, Malaise det. 1930”, “Paralectotype, *Tenthredo trialbata* Malaise, 1931, Det. A. Shinohara, 1997” [light blue], “*Tenthredo contusa* Enslin, Det. A. Shinohara, 1997” (BMNH).

Remarks. Malaise (1931 b) described this species on the basis of “2 ♂♂ und 7 ♀♀ bei Wladiwostok (Sedanka, Kangaus, Tigrowaja und Suchan) 20/6-14/7 gefangen”. I have examined three female syntypes listed above, and the one with Malaise’s original type label in Stockholm is hereby selected as the lectotype.

I have directly compared the lectotypes of *Tenthredo lateralis* Mocsáry, 1909 (= *T. contusa* Enslin, 1912), and *Tenthredo trialbata* Malaise, 1931, and confirmed that they are conspecific.

***Tenthredo basizonata* Malaise**

(Fig. 9)

Tenthredo basizonata Malaise, 1938, p. 91.

Current systematic position. A valid species, *Tenthredo basizonata* Malaise, 1938.

Holotype (original designation): ♀ in Paris Museum. Not examined.

Paratype (Fig. 9): 1 ♀ labeled “JAPON Chuzenji, 8/8 1909, Edme Gallois”, “Typus”, “*Tenthredo basizonata* n. sp., Malaise det. 1938” (NRMS). In excellent condition.

Remarks. This species was described on the basis of “2 ♀ from Japan (Chúzenji), 8/8 1909. Leg. Edm. Gallois”, one of which is the “Type in Mus. Paris” and the other is the “paratype in the author’s collection” (Malaise, 1938). The type locality, Chuzenji, is a well-known lake at an altitude of 1,200 m in Nikko, Tochigi Prefecture, central Honshu.

***Tenthredo grandiceps* Malaise**

(Fig. 10)

Tenthredo grandiceps Malaise, 1938, p. 93.

Current systematic position. A junior synonym of *Tenthredo longipennis* (Matsumura, 1912).

Holotype (by monotypy; Fig. 10): ♀ labeled “100 km W. fr. Tokyo”, “Typus” [red], “Coll. Malaise, *Tenthredo grandiceps* n. sp., Malaise det. 1938” (NRMS). In excellent condition.

Remarks. This is a junior synonym of *Tenthredo longipennis* (Matsumura, 1912), where it was correctly placed by Takeuchi (1952). This is very closely allied to *Tenthredo tumida* (Mocsáry, 1909) from the Russian Far East, as was recently discussed by Taeger and Blank (1996).

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Erratum

Two new genera belonging to the family Porcellidiidae (Crustacea, Copepoda, Harpacticoida) from Iwate Prefecture, Japan. By V. A. Harris and N. Iwasaki, Bull. Natn. Sci. Mus., Tokyo, Ser. A, 22 (4), pp. 199–218.

The illustrations on p. 213 and p. 214 should be transposed.