Case 3066

Macrophya Dahlbom, 1835 (Insecta, Hymenoptera): proposed designation of Tenthredo montana Scopoli, 1763 as the type species; and Tenthredo rustica Linnaeus, 1758: proposed conservation of usage of the specific name by the replacement of the syntypes with a neotype

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Abstract. The purpose of this application is to conserve the understanding of the name Macrophya Dahlbom, 1835, which has been used for a genus of sawflies included in the family Tenthredinidae (tribe Macrophyini) since its original publication. However, in 1934 the name of the type species of the genus, Tenthredo rustica Linnaeus, 1758, was transferred to a species of sawfly included in the genus Arge Schrank, 1802 (family Argidae), thereby formally rendering the name Macrophya a junior subjective synonym of Arge. It is proposed that Tenthredo montana Scopoli, 1763 be designated as the type species of Macrophya in accord with the long-established and universal usage of the generic name. It is also proposed that the name-bearing status of the syntypes of Tenthredo rustica Linnaeus, 1758 be set aside and a neotype designated in accord with the use since 1934 of the specific name for a well-known and widespread species of Arge.

Keywords. Nomenclature; taxonomy; Hymenoptera; Tenthredinidae; Macrophyini; Argidae; sawflies; Macrophya; Macrophya montana; Arge rustica.

1. Dahlbom (1835, pp. 4, 11) established the name Macrophya for a subgenus of the sawfly genus Tenthredo Linnaeus, 1758. The subgenus included 12 nominal species, among them 'Tenthredo (Macrophya) rustica'. Dahlbom did not characterise the species, nor give an authorship and date for the name.

2. Westwood ([1839], p. 53) designated 'T. rusticus Linnaeus. Pz.64.10' as the type species of Macrophya. Westwood's type species designations were accepted in Opinion 71 (January 1922) and Direction 32 (May 1956), and the dates of the parts of his publication were set out in Direction 63 (June 1957).

3. The notation 'Pz.64.10' refers to Panzer's ([1799], pl. 10) description of his new species Tenthredo notata from Austria, which undoubtedly represents the female of the species that was called Macrophya rustica until the publication of Malaise & Benson (1934), that is, the species now called Macrophya montana (Scopoli, 1763) (see para. 4 below).

4. On the basis of the original description by Linnaeus (1758, p. 556), Malaise & Benson (1934, pp. 4-5) pointed out that Tenthredo rustica Linnaeus, 1758 is not the species which was for a long time called Macrophya rustica by authors but is a species of the genus Arge Schrank, 1802. Malaise & Benson (1934) discussed the type
material of *Tenthredo rustica* Linnaeus from Linnaeus’s collection in London and noted:

‘There are 5 (females) of the species now known as *Macrophya rustica* (Linné):
1 (female) unlabelled, 2 (females) labelled ‘n. 141’, and 2 (females) labelled ‘similimus rusticae sed distincta angl. B. Clark’.

But these specimens do not agree with the original description of 1758, which is repeated in *Fauna Suecica* (1761), in which the species described comes under the heading ‘Antennis subclavatis continuis, nec articulatis’ and the description reads ‘abdomine nigro; cingulis quattuor flavis’. *Arge atrata* (Forster, 1771) is the only Swedish species which fits this description.

In the later description of 1767, Linné places the species in a group by itself under the heading ‘Antennis subclavatis, articulatis’, with the word ‘nec’ accidentally omitted before ‘articulatis’; there can be doubt about this and if this is recognised the descriptions of 1758 and 1767 tally. In no other instance has Linné spoken of the antennae as being segmented without indicating how much so, i.e. ‘plurimis articulatis’ or ‘7 and 8 atriculatis’, etc. The omission of the word ‘nec’ in 1767 is not sufficient evidence for saying that Linné made a mistake in 1758 and that he really was describing a *Macrophya* with 7-segmented flagellum. *Arge atrata* (Forster, 1771) must become *Arge rustica* (Linné, 1758), and *Macrophya rustica* auct., nec Linné, therefore becomes *Macrophya montana* (Scop.) (*Tenthredo montana* Scopoli 1763)

5. On the basis of Linnaeus’s (1758) description, Malaise & Benson (1934) referred the name *Tenthredo rustica* Linnaeus, 1758 to a species of *Arge* (family argidae), and not to a species of *Macrophya* (family tenthredinidae). The loss of the specific name of *Tenthredo atrata* Forster, 1771 (p. 80), the transfer of the name rustica from the one species to the other, and the introduction of the name *montana* Scopoli, 1763 in place of rustica as hitherto understood, caused confusion in the use of the specific names of two common European sawfly species. In a few cases *Macrophya rustica* continued to be used as a valid name (see, for example, Muche, 1968, p. 14; Scobiola-Palade, 1978, p. 222), probably because these authors were unaware of the paper by Malaise & Benson (1934). However, Malaise & Benson’s nomenclatural arrangement has now been widely accepted.

6. It is not immediately clear which species Dahlbom (1835) understood as *Tenthredo (Macrophya) rustica* when proposing the name *Macrophya* because he neither described the species nor mentioned the author of the name (para. 1 above). The species is merely listed, followed by several names of Scandinavian locations. However, the other species listed under *Macrophya* by Dahlbom indicate beyond all doubt what he understood as this subgenus: *Tenthredo duodecimpunctata* Linnaeus, 1758, *T. blanda* Fabricius, 1775, *T. albicincta* Schrank, 1776, *T. albipuncta* Fallén, 1804, *T. ribis* Schrank, 1781, *T. neglecta* Klug, 1814 (currently *Macrophya annulata* (Geoffroy, 1785)), *T. strigosa* Fabricius, 1798 (currently *M. rufipes* (Linnaeus, 1758)), *T. punctum* Fabricius, 1781 (currently *M. punctumalbum* (Linnaeus, 1767)), *T. quadrimaculata* Fabricius, 1781 (a senior synonym of *M. sanguinolenta* (Gmelin, 1790)), *T. rapae* Linnaeus, 1767 and *T. variegata* Fabricius, 1808. The last two species are currently included in *Pachyprotasis* Hartig, 1837, a related member of the tribe MACROPHYINI in the TENTHREDINIDAE. In the generic key for *Macrophya*, Dahlbom (1835, p. 4) used a character (‘coxis posticis maximis’) which is still used
today to differentiate the MACROPHYINI from other tribes of the TENTHREDININAE. Furthermore, he distinguished (p. 3) species of Macrophya, including rustica, from members of the genus Hylotoma Latreille, 1803 (a junior synonym of Arge Schrank, 1802) by ‘Antennae subsetaceae aut subfiliformis ... Antennae articulis 9’, whereas Hylotoma species were characterised by the conspicuous shape of the antennae (‘Antennae subcylindricaee, mediocres, articulis 3’). Thus from the content of his work it is evident that Dahlbom (1835) interpreted Tenthredo rustica Linnaeus, 1758 as a species of Macrophya.

7. It is also evident from Westwood’s ([1839]) type designation (para. 2 above) that he interpreted the type species ‘T. rusticus Linn. Pz. 64.10’ in the sense of Panzer ([1799]), i.e. as a species of Macrophya.

8. The description of Tenthredo montana Scopoli, 1763 (pp. 276–277, fig. 724), which was based on a pair of specimens captured in copulation ‘in montanis districtis Idriensis’ (Slovenia), leaves no doubt that the species is the same as Macrophya rustica as understood before 1934, i.e. a species of Macrophya.

9. The generic name Macrophya Dahlbom, 1835 is used in the sense of Tenthredo rustica as understood before 1934 (i.e. Tenthredo montana Scopoli, 1763), and not in the sense of Linnaeus’s (1758) description. Authors have been aware of the problem of the type species of Macrophya but so far none has proposed a solution. Smith (1979, p. 120) wrote: ‘Type species: Tenthredo rusticus [recte rustica] Linnaeus Design. by Westwood, 1840 [recte 1839]. T. rusticus in sense of authors at that time’; Gibson (1980, p. 15) noted: ‘Tenthredo rusticus auct. nec. Linnaeus = Macrophya montana (Scopoli). By subsequent designation by Westwood, 1840’; and Abe & Smith (1991) recorded: ‘Tenthredo rusticus auct., nec. Linnaeus (Designated by Westwood, 1840’).

10. The genus Macrophya comprises more than 150 species and has a wide range of distribution. The name is cited by many authors; virtually every work on the sawfly fauna of Europe or the Mediterranean area includes at least one, and usually several, Macrophya species because they are comparatively abundant and can be collected easily from flowers, particularly Macrophya montana from flowers of the family Apiaceae (alternatively known as Umbelliferae). Members of the genus Macrophya are widespread in the Western Palaearctic (see, for example, Muche, 1968; Ermenenko, 1977; Magis, 1985; Zhelochovtsev, 1988; Lacourt, 1991; Chevin, 1995; Blank et al., 1998; and Taeger et al., 1998), the Eastern Palaearctic (see, for example, Naito, 1978; Inomata & Shinohara, 1993; Shinohara, 1997; and Wei & Ma, 1997), the Nearctic (see, for example, Gibson, 1980; and Smith, 1991), and the Indian subcontinent (see, for example, Singh & Saini, 1989; Saini, Bharti & Singh, 1996). A representative list of a further 24 references, mainly of taxonomic works from the past 20 years, which demonstrate the usage of the name Macrophya, is held by the Commission Secretariat. Recognition that as a consequence of Malaise & Benson’s (1934) nomenclatural rearrangement the name Macrophya Dahlbom, 1835 (family TENTHREDINIDAE) becomes a junior subjective synonym of Arge Schrank, 1802 (family ARGIDAE), and that a new name is needed for the genus Macrophya as always understood, would cause considerable confusion.

11. In order to maintain the original and current usage of the name Macrophya, in the interest of stability of nomenclature, we propose that Tenthredo montana Scopoli, 1763 be designated the type species of Macrophya. As stated in para. 8 above, this is the taxonomic species which before 1934 was called M. rustica.
12. Since 1934 (Malaise & Benson’s publication), the specific name of *Tenthredo rustica* Linnaeus, 1758 has been used for a well-known and widespread species of *Arge* Schrank, 1802, which was formerly known as *Arge* (or *Hylotoma*) *atrata* (Forster, 1771) (see paras. 4 and 5 above). To ensure the continuing clarity, security and stability of uniform usage of *Arge rustica* (Linnaeus, 1758) we propose that the syntypes (see para. 4 above) be set aside and that a neotype be designated in accord with the current usage of the name. The proposed female neotype is labelled as follows: ‘*Hylotoma atrata* Forst. Schwerin’; ‘coll. Konow’; ‘Neotype [female] *Tenthredo rustica* Linné, 1758’; ‘*Arge rustica* (Linné) [female] det. Blank & Taeger 1999’. It is deposited in the collection of the Deutsches Entomologisches Institut, Eberswalde, Germany. The species can be identified unambiguously using the keys of Enslin (1917, in which it is named *Arge atrata*), Gussakovskij (1935), Benson (1951), Ermolenko (1975, figs. 63–64 which show illustrations of both male and female specimens), Muche (1977) and Quinlan & Gauld (1981). *Arge rustica* (including the neotype) is unique among European species of the genus *Arge* in the conspicuous colour pattern of the abdomen of females (abdomen black, tergum 1 and terga 3-5 with light pattern). A representative list of a further 16 references, dating from 1957 to 1998, which demonstrate the current usage of the specific name *rustica* for a species of *Arge* is held by the Commission Secretariat.

13. The International Commission on Zoological Nomenclature is accordingly asked:

1. to use its plenary powers:
   (a) to set aside all previous designations of type species for the nominal genus *Macrophya* Dahlbom, 1835 and to designate *Tenthredo montana* Scopoli, 1763 as the type species;
   (b) to set aside all previous type fixations for the nominal species *Tenthredo rustica* Linnaeus, 1758 and to designate the female specimen in the Deutsches Entomologisches Institut, Eberswalde, Germany, referred to in para. 12 above, as the neotype;

2. to place on the Official List of Generic Names in Zoology the name *Macrophya* Dahlbom, 1835 (gender: feminine), type species by designation in (1)(a) above *Tenthredo montana* Scopoli, 1763;

3. to place on the Official List of Specific Names in Zoology the following names:
   (a) *montana* Scopoli, 1763, as published in the binomen *Tenthredo montana* (specific name of the type species of *Macrophya* Dahlbom, 1835);
   (b) *rustica* Linnaeus, 1758, as published in the binomen *Tenthredo rustica* and as defined by the neotype designated in (1)(b) above.

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References


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