

A new European species of *Torymus* with a note on the identity of *Torymus incertus* FÖRSTER, 1841

(Insecta: Hymenoptera: Torymidae)

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Abstract

The identity of the European species *Torymus incertus* FÖRSTER, 1841, has been doubtful until now. However, a syntype ♀ is present in The Natural History Museum, London; this is designated as lectotype. It belongs to the species currently known as *T. nitens* (WALKER, 1833), of which *T. incertus* becomes a junior synonym (syn.n.). The species was misidentified by MAYR (1874) and *T. incertus* sensu MAYR is here described as *T. longicalcar* sp.n., with an account of its hosts and distribution.

Key words: Hymenoptera, Torymidae, *Torymus*, new species, Europe, previous misidentification, synonymy, lectotype.

Zusammenfassung

Die Identität der europäischen Art *Torymus incertus* FÖRSTER, 1841 war bisher nicht klar. Jedoch befindet sich im Naturhistorischen Museum in London ein ♀ Syntypus, welches als Lectotypus designiert wird. *Torymus incertus* wird als neues Synonym zu *Torymus nitens* (WALKER, 1833) gestellt (syn.n.). Die Art wurde von MAYR (1874) falsch interpretiert. *Torymus incertus* im Sinne von MAYR (1874) wird als neue Art, *Torymus longicalcar* sp.n., beschrieben. Es werden Anmerkungen über seine Wirte und seine Verbreitung gemacht.

Introduction

The present paper has resulted from the author's research on the identity of *Torymus incertus* FÖRSTER (1841: 33) [owing to a typographical error the page number is printed as '31' in the copies seen]. The description, of the ♀ is short. It contains the statement 'Hinterleib ... in der Mitte sehr schwarz kupferviolett schimmernd'. As RATZBURG (1844: 178) already remarked, the word 'schwarz' was evidently a mistake for 'schwach'.

MAYR (1874: 94-95) did not see Förster's original material and misidentified *T. incertus* as a species having the female gaster partly yellow, a feature not mentioned in Förster's description. Clearly he had some doubt, however, as he remarked (MAYR 1874: 95) that Förster's description applied better to *Torymus regius* (NEES).

A search was made for the original material of *T. incertus*. In the Natural History Museum in Vienna two mounts were found under this name, both representing Förster material. One mount bears a ♀ of *Torymus* (*Syntomaspis*) *varians* (WALKER) which agrees in colour with the description of *T. incertus*. I am reluctant to accept it as lectotype because it seems unlikely that Förster would have overlooked its offset frenum,

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the character on which he later based his genus *Syntomaspis*. The second mount carries a ♀ *Torymus* disagreeing with the description in having the ovipositor much too short. The collection of The Natural History Museum, London, contains a ♂ and a ♀ on minutien pins and mounted on a pith block, labelled in Förster's handwriting 'Torymus incertus Foerst. Aachen'. There is another BMNH circular accession label with the number 46.16; the BMNH Register for 1846 lists 16 as material from Aix la Chapelle presented by Edward Doubleday. A further note on page 203 of the register states that all the material under 46.16 had been named by Förster. The ♀ on the BMNH mount agrees very well with Förster's description of *T. incertus* and is here designated Lectotype. It belongs to the species currently known as *Torymus nitens* (WALKER, 1833) of which it becomes a junior synonym (syn.n.). WALKER (1848: 102) synonymised *T. incertus* with *T. regius* NEES (another synonym of *T. nitens*), probably on the basis of the specimens just referred to. The species misidentified by Mayr as *T. incertus* appears to be undescribed and is treated below as new.

Depositories: BMNH - The Natural History Museum, London. MJG - M.J. Gijswijt collection, 's Graveland, The Netherlands. NMV - Naturhistorisches Museum, Vienna. TMA - Természettudományi Múzeum Allatára, Budapest. ZB - Z. Bouček collection, London.

Abbreviations: POL - distance between inner edges of the two lateral ocelli. OOL - distance between outer edge of a lateral ocellus and adjacent eye. OD - major diameter of a lateral ocellus. F1, F2, ... F7 - segments of antennal funicle. M, PM, ST - marginal, postmarginal and stigmal veins of forewing.

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Torymus longicalcar sp.n.

(Figs. 1 - 5)

Torymus incertus FÖRSTER: MAYR 1874 Verh. zool.-bot. Ges. Wien 24: 94-95. ERDÖS 1956 Ann. hist.-nat. Mus. nat. hung., (series nova) 7: 182-183. Misidentifications.

Holotype ♀, Austria: unlocalised but probably Vienna district, reared July from *Spathegaster nervosa* [= *Dryocosmus nervosus* (GIRAUD) (Hym., Cynipidae)]; labelled 'Collect. G. Mayr; *T. incertus* Rtz [sic] det. G. Mayr; nervos Juli' (G. Mayr) (NMV).

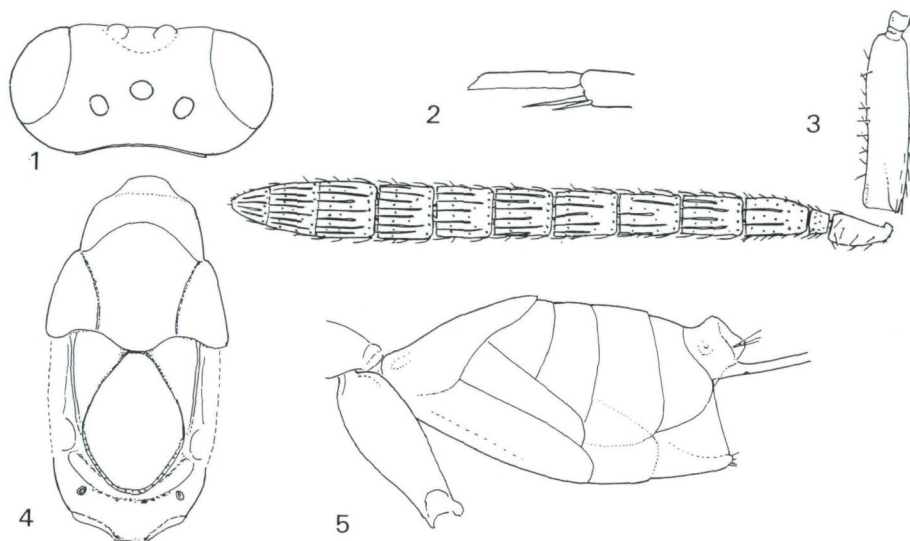
Paratypes. Austria: 6 ♂♂, Gugging, 1903 (Ruschka) ex *Dryomyia circinnans* MAYR (Dipt., Cecidomyiidae), 14 ♂♂, 5 ♀♀, 1934, ex *D. circinnans*; 5 ♀♀, Piesting (Tschech); 2 ♂♂, 2 ♀♀, Weyer, 1918, ex *Pediaspis aceris* (FÖRSTER) (Hym., Cynipidae); unlocalised but probably Austria, 15 ♂♂, 16 ♀♀ 'Collect. G. Mayr; *Tor. incertus* Fö. det. G. Mayr' (NMV).

Germany: ♂♀ 'Brühl-Cöln. (Eigen)'; 1 ♀, Thüringen (Schmiedeknecht) (NMV).

Greece: 2 ♀♀, Ipiras, prov. Ioanina, Monodendri, 18.vi.1989, on *Acer* (M.J. Gijswijt) (MJG); 1 ♀, Peloponese, prov. Lakonia, Parori, 5 km E. of Sparti, 3.v.1989 (M.J. Gijswijt) (MJG).

Hungary: 1 ♂, Bakony, 7.vii.1953, on *Alnus glutinosa*; 1 ♀, Bódvaráko, 3.x.1943, on *Cornus sanguinea*; 1 ♀, Bükk h., 27.vii.1954, on *Salix caprea*; 1 ♀, Mátra, 25.vii.1953, 19 ♀♀, all on *Alnus glutinosa* (Erdős) (TMA).

Italy: 1 ♀, Em-Ro, prov. Forlì, Rocca Centoforcha, 17.v.1993 (M.J. Gijswijt) (MJG); this specimen has ovipositor slightly shorter than the body.



Figs. 1 - 5: *Torymus longicalcar* sp.n., female. - (1) head, (2) tip of hind tibia with spurs, basitarsus, (3) right antenna, (4) thorax, (5) gaster, profile.

Slovakia: 1 ♀, Sladkovicovo, viii.1967, on *Cornus mas* (Capek), 1 ♀, same data (St. Szamak) (ZB).

Switzerland: 3 ♀♀, Aarau, vi.1918, ex *Pediaspis aceris* (C. Ferrière) (BMNH).

Diagnosis: ♀ - Scutellum without an offset frenum. Longer spur of hind tibia 0.6 - 0.65 length of basitarsus (Fig. 2) and twice or virtually twice as long as the shorter spur, 1.65 - 2.0 times the maximum breadth of the tibia. Hind coxae bare dorsally in their basal half; basitarsus of hind leg nearly or quite half as long as the tibia. Gaster in profile (Fig. 5) with tip of hypopygium very near to or level with apex of gaster. Ovipositor sheaths usually a little longer, occasionally slightly shorter, than the body. Thorax (Fig. 4) slender, 1.9 - 2.2 times as long as broad. Legs very slender; hind coxae more than 2.5 times as long as broad. Gaster reddish-yellow ventrally in at least basal half, sometimes whole gaster except the dorsal surface yellow. Other characters - Head (Fig. 1) somewhat broader than thorax, about twice as broad as long; temples about 0.25 apparent length of eyes, converging fairly strongly, curved; POL 2.1 - 2.5 OOL, OOL 0.9 - 1.1 OD. Mouth about twice malar space. Malar space 0.31 - 0.37 length of eye. Genae straight in front view of head. Antenna (Fig. 3): scape about 0.7 length of eye, reaching lower edge of median ocellus; pedicellus plus flagellum 1.5 - 1.6 times breadth of head; pedicellus in dorsal view 1.6 - 1.8 times as long as broad, about as long as, or very slightly shorter than F1; annellus subquadrate; flagellum proximally not stouter than pedicellus but thickening slightly distad, F1 about 1.5 times as long as broad, following segments decreasing slightly in length, F6 and F7 quadrate, or F7 very slightly transverse; sensilla moderately numerous, uniseriate. Piliferous punctures of mesoscutum and scutellum very numerous but small, fairly close together on mesoscutum but sparser on scutellum; setae

subdecumbent except on posterior third of scutellum where they are longer and raised somewhat. Propodeum shiny, very weakly alutaceous. Mesepimeron small, slightly higher than broad, its height less than that of mid coxa. Forewing about 2.5 times as long as broad; upper surface of costal cell bare except for one row of setae which is widely broken medially; basal vein with 2 - 5 setae; speculum extending a short distance below M, partly open below; wing beyond it rather sparsely setose, though moderately so distad. Gaster as long as or slightly longer than thorax, somewhat compressed; basal sternite (Fig. 5) very long, extending well beyond tips of hind coxae; hypopygium bare except for a few setae at tip; ovipositor sheaths 3.3-5.0 times length of hind tibia.

Head and thorax brassy-green to greenish-blue; gaster blue-green to blue, with ventral surface reddish to yellowish over at least basal half, sometimes the whole ventral surface yellow. Antennal scape yellow, more or less infuscate dorsally, rest of antenna black. Legs yellow-testaceous with mid coxae more or less, hind coxae except sometimes apically, dark; hind tibiae sometimes infuscate medially; tips of tarsi fuscous. Wings hyaline, tegulae and venation yellowish. Length excluding ovipositor, 2.0 - 3.0 mm.

♂. Length of longer spur of hind tibia 1.3 - 1.5 times the breadth of the tibia and twice as long as the shorter spur, fully half as long as the basitarsus. Hind coxae bare dorsally in basal half. Lateral ocelli rather large, OOL 0.9 - 1.1 OD. Antennal scape more or less yellow. Thorax 1.9 - 2.0 times as long as broad. Gaster at least reddish to yellowish ventrally in basal half, usually also with a median transverse band of the same colour dorsally. Fore and hind femora slender, 4.0 - 4.7 times as long as broad. Legs including fore coxae more or less, yellow; occasionally hind femora more or less infuscate. The above combination of characters will distinguish the ♂ from that of *T. auratus* (GEOFFROY) which otherwise somewhat resembles it, also from the ♂♂ of all other European species.

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