THE IDENTITY OF THREE FABRICIAN CHRYSIDID SPECIES (HYMENOPTERA)

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As part of a world revision of the family Chrysididae it has been necessary to borrow or study in situ as many of the oldest types as possible because of potential confusion about their identity. The species described by Fabricius represent a particular problem. He named many of the commonest European species, as well as other less common ones. Although the majority of Fabrician type specimens are still extant, it is clear that the chrysidid types were never seen by most later workers. In several instances the Fabrician species was assumed to be one thing when in fact it belonged to an entirely different genus. One example of this was *Chrysis festiva* Fabricius, which has always been considered a *Pentachrysis*, or *Chrysis* with 5 apical abdominal teeth (Mocsáry 1889, Dalla Torre 1892, Bischoff 1913). However, *festiva* is actually a species of *Paranopes*, as discussed by Kimsey (1987). The three species below present similar problems.

Omalus gloriosa (Fabricius), N. STATUS

Chrysis gloriosa Fabricius 1793: 242. Holotype female; "Barbaria" (Kiel Coll., Copenhagen).

The name *gloriosa* has long been used for one of the most commonly collected species of *Holopyga* in the Palearctic Region (Dahlbom 1854, Mocsáry 1889, Dalla Torre 1892, Bischoff 1913). *Holopyga amoenula* Dahlbom was listed as a junior synonym of *gloriosa* by Bischoff (1913) and later by Bodenstein (1939), which made *gloriosa* the defacto type of *Holopyga*. However, *amoenula* is the designated type.

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Examination of the *gloriosa* type revealed that it is actually an *Omalus*, conspecific with *Omalus auratus* (Linnaeus) 1758, and therefore a junior synonym of that species.

Holopyga fervida (Fabricius)

Chrysis fervida Fabricius 1781: 457. Type ?; Italy (lost ?).

Chrysis fervida Fabricius 1787: 283. Four specimens; Spain (Kiel Coll., Copenhagen).

Holopyga fervida of authors.

Kimsey (1986) designated a lectotype of this species in the Lepeletier collection in the Museum National d'Histoire Naturelle, Paris from a series of specimens labeled as Fabrician types. However, these specimens were from the Paris area. In the oldest description of this species (1781) Fabricius gives Italy as the type locality. Zimsen (1964) was unable to locate this type (or types ?). As a result, it must be assumed that the original type has been lost. Fabricius later described the species from 4 specimens from Spain. Therefore the specimen from Paris labeled lectotype is actually an invalid type.

In his 1787 description of *fervida* Fabricius states "An distincta species?". Whether this means that these specimens represent a different species from the one he described in 1781 is unclear. However, since he did call these *fervida* and the original specimen(s) cannot be located, it is important to designate one of these a neotype. Designation of a neotype is necessary for 2 reasons: (1) one of these 4 specimens is a species of *Hedychridium*, not *Holopyga*, and (2) *fervida* is a common European species, so the name should be associated with a type specimen. Therefore, I am designating a female from the Kiel Collection, which is in reasonably good condition and is a typical *fervida* as described by other workers.

Chrysis purpurata Fabricius

Chrysis purpurata Fabricius 1787: 283. Lectotype male; "Halae Saxonom" (Kiel Coll., Copenhagen). New designation.

Chrysis iris Christ 1791: 405. No type data available. New synonymy.

Euchroeus purpurata of Latreille 1809: 49 (#578).

As with *gloriosa* the name *purpurata* has been used for the commonest species of "*Euchroeus*" in Europe. This species was designated as the type of *Euchroeus* by Latreille 1809. Unfortunately, examination of the 3 syntypes of *purpurata* in the Kiel Collection revealed that they are typical *Chrysis* and not what is supposed to be

Euchroeus. The shape and dentition of the apical rim of the abdomen, body color, punctuation and facial structure indicate that *purpurata* is the senior synonym of *Chrysis iris* Christ. Because Latreille (1809) designated *purpurata* the type of *Euchroeus*, and this species is in fact a typical *Chrysis* Linnaeus, *Euchroeus* is therefore a junior synonym of *Chrysis*. Although some argument could be made for conserving the name *Euchroeus* this is a relatively rare group of species occurring in the Palearctic and Ethiopian Regions, which has never had a major revision. The next available name for this genus is *Brugmoia* Radoszkowski 1877 (type: *Brugmoia pellucida* Radoszkowski 1877).

SUMMARY

The true identity of 3 chrysidid species, *Chrysis gloriosa*, *fervida* and *purpurata*, described by Fabricius are determined. A lectotype is designated for *purpurata*. *Chrysis gloriosa* is a junior synonym of *Omalus auratus* (Linnaeus) 1758. *Chrysis purpuratus* is the senior synonym of *iris* Christ 1791; it is also the type of *Euchroeus* Latreille, making *Euchroeus* a junior synonym of *Chrysis* Linnaeus. The next available name for the genus previously called *Euchroeus* is *Brugmoia* Radoszkowski 1877. *Chrysis fervida* is actually a *Holopyga*, and a neotype is designated for this species.

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