

Eugeniusz KIERYCH

Notes on the genus *Saphonecrus* DALLA TORRE et KIEFFER, 1910  
(Hymenoptera, Cynipidae)

[With 10 Text-figures]

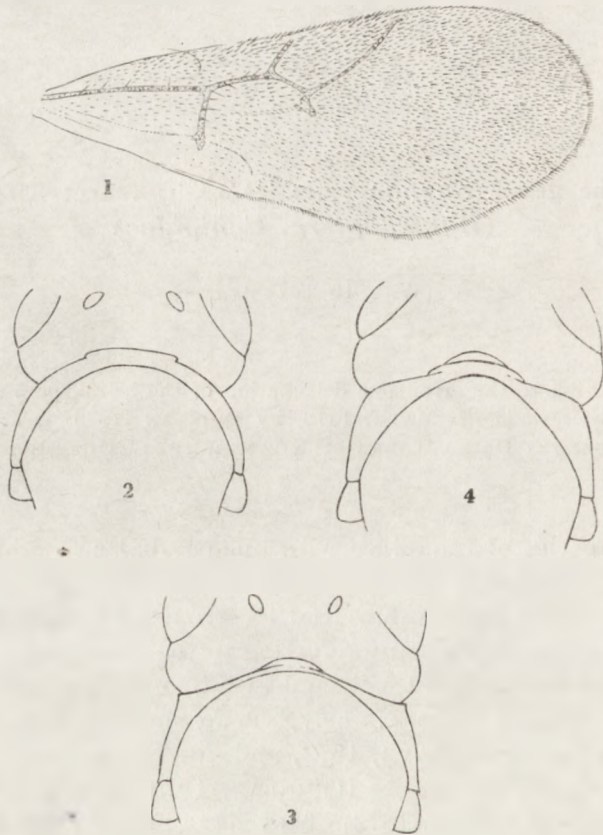
**Abstract.** The attention to the erroneous designation of the lectotype and one of the paralectotypes of *Synergus variabilis* MAYR, 1872, by QUINLAN (1978) is drawn. The validity of the genus *Saphonecrus* DALLA TORRE et KIEFFER, 1910, is questioned.

The group-species of inquilines with open radial cell, which are included into the genus *Saphonecrus* DALLA TORRE et KIEFFER, 1910, requires careful identification. Any inattention may lead to erroneous classifications, examples of which can be found in literature referring to the *Cynipidae*. One of them has to be urgently corrected because it could lead to some superfluous confusion in the taxonomy of *Synerginae*. Namely, the specimen designated as the lectotype of *Synergus variabilis* MAYR, 1872, and one of the specimens selected as the paralectotypes of this species (QUINLAN, 1978) belong with no doubt to *Saphonecrus undulatus* (MAYR, 1872). They have open radial cell, mesoscutum without notaulices and 13 segmented antennae. The two other paralectotype-specimens, ♀ and ♂ settled on one pin together, are determined correctly, they belong to *Synergus variabilis* MAYR.<sup>1</sup>

<sup>1</sup> The "type-series" of *S. variabilis* MAYR and lectotype as well as paralectotypes designated by J. QUINLAN were seen in Naturhistorisches Museum in Wien and examined by the author in December, 1983. Lectotype-specimen with attached labels: 1. a purple edged circular label with printed word "Lectotype", 2. a green piece of paper with words "*Synergus variabilis* MAYR, Austr. p. 702", 3. a label with words "In G. MAYR Bd. XXII. p. 702", 4. a white, little piece of cardboard with words "*Syn. variabilis*" (hand writing) "det. G. MAYR" (type writing), 5. a label with words "Lectotype ♀ *Synergus variabilis* MAYR

The redescription of *S. variabilis* MAYR, published by QUINLAN (1978) is incorrect in consequence of erroneous designation of the lectotype of this species. *S. variabilis* MAYR does not possess the characters such as "pronotum with strong lateral carinae" and "notaulices obsolete" mentioned in QUINLAN's redescription. As a matter of fact, the description of *S. variabilis*, given by QUINLAN (1978), does not refer to any species described by MAYR (1872).

With reference to above, the lectotype of *S. variabilis* MAYR must be designated once more. One should take into account that "the type-series" of this



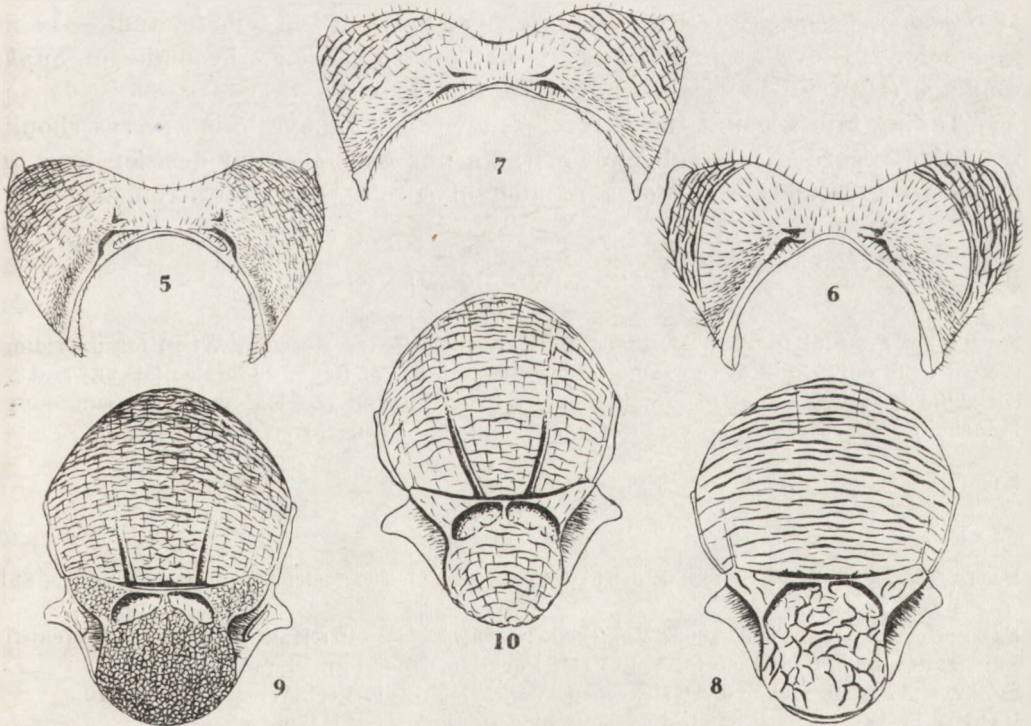
Figs. 1-4. 1. *Saphonecerus undulatus* (MAYR), right fore wing. 2-4. Pronotum with parts of head and mesoscutum, 2 - *Saph. connatus* (HARTIG), 3 - *Saph. undulatus* (MAYR), 4 - *Synergus variabilis* MAYR.

det. J. QUINLAN 1977". Paralectotype-specimens: ♀, with attached labels: 1. "G. MAYR", 2. "In G. MAYR, Bd. XX: p. 702, *Synergus variabilis* MAYR, det. G. MAYR", 3. a red piece of paper with word "type", 4. a blue edged circular label with the printed word "Paralectotype", 5. "Paralectotype ♀ *Synergus variabilis* MAYR det. J. QUINLAN 1977" (specimen determined wrongly). ♀ and ♂, settled on one pin together with labels as paralectotype above (determined rightly).



species housed in Naturhistorisches Museum in Wien, composed of 48 pins (one or a few specimens on each pin), is not conspecific. There are specimens of *S. variabilis* MAYR and *Saphonecerus undulatus* (MAYR). It is reasonable to suppose that these two inquilines had been reared from galls of *Aphelonyx cerricola* (GIRAUD) and not separated. The labels with name "*Synergus variabilis* MAYR" and "type" were not attached by G. MAYR himself but, probably, by somebody else.

FORSTER (1869) was the first to separate the taxon of inquilines with open radial cell. Unfortunately, the type-species, *Synergus apicalis* HARTIG, 1841, of his monobasic genus, *Sapholytus*, proved to be one of the *Synergus*-species. Because of that, *Sapholytus* FÖRSTER, 1869, was synonymized with *Synergus* HARTIG, 1840, by DALLA TORRE and KIEFFER (1910). The conception, however, of separate taxon of generic level was retained. DALLA TORRE and KIEFFER (1910) introduced a new name of genus, *Saphonecerus*, with the type-species, *Synergus connatus* HARTIG, 1840. This conception has been accepted by all later cynipidologists (TAVARES 1920, WELD 1952, IONESCU 1957, EADY and QUINLAN 1963, KIERYCH 1979, and others) but I am not certain if it is well-founded. The problem was mentioned long time ago by EADY and QUINLAN (1963), too. The two genera may be separated only on the combination of characters. Each



Figs. 5-10. 5-7. Pronotum in anterior view, 5 - *Saph. connatus* (HARTIG), 6 - *Saph. undulatus* (MAYR), 7 - *Synergus variabilis* MAYR. 8-10. Mesonotum in dorsal view, 8 - *Saph. undulatus* (MAYR), 9 - *Saph. connatus* (HARTIG), 10 - *Synergus variabilis* MAYR.

character that we use at present, except number of segments of the females antennae, is not a distinctive feature of the species of *Synergus* or *Saphonecrus*.

1. Radial cell. Open in the species of *Saphonecrus* (Fig. 1), closed in *Synergus*-species, except *S. apicalis* HARTIG, the radial cell of which is in most part open.

The reduction of marginal vein takes place in many groups of *Cynipoidea* independently and paralelly so that the feature, open or closed radial cell, has a reasonable taxonomic value.

2. Structure of pronotum. The pronotum of *Saph. connatus* (HARTIG) has no lateral carinae (Figs. 2, 5) but they are well developed on pronotum of *Saph. undulatus* (MAYR) and *Saph. haimi* (MAYR) (Figs. 3, 6). The species of *Synergus*, e.g. *S. variabilis* MAYR (Figs. 4, 7) has the pronotum without lateral carinae, too.

3. Structure of mesonotum. The notaulices on mesoscutum of *Saphonecrus*-species are reduced either completely, e.g. of *Saph. undulatus* (MAYR) (Fig. 8) or in its anterior part, e.g. of *Saph. connatus* (HARTIG) (Fig. 9). The reduction of notaulices in the part of mesoscutum appears also in some *Synergus*-species, e.g. *S. variabilis* MAYR (Fig. 10).

4. Number of segments of antennae. The female of *Synergus*-species has antennae with 14 segments, male with 15. The number of segments of antennae of *Saphonecrus*-species is reduced, as a rule, to 13 in the female, and — 14 in the male. However, this character is not invariable, e.g. the males of *Saph. connatus* (HARTIG) have antennae with 15 segments.

Taking into account the characters mentioned above, *Saphonecrus* should be rather regarded as a subgenus of the genus *Synergus*, but decision may be taken after detailed study of a number of species, especially from America.

#### ACKNOWLEDGEMENTS

I am grateful to Prof. M. FISCHER (Naturhistorisches Museum, Wien) for providing me with the opportunities to examine the type-material of *Saph. undulatus* (MAYR) and *S. variabilis* MAYR. I would like to thank Dr. Erich DILLER (Zoologische Staatssammlung, München) for providing the types of *Saph. connatus* (HARTIG) on loan.

#### REFERENCES

- DALLA TORRE K. W., KIEFFER J. J. 1910. *Cynipidae*. Das Tierreich, **24**. Berlin, XXXV + 891 pp., 422 ff.
- EADY R. D., QUINLAN J. 1963. *Hymenoptera, Cynipoidea*. In: Handbooks for the Identification of British Insects, Vol. VIII, Part I (a). London, 81 pp., 371 ff.
- FÖRSTER A. 1869. Ueber die Gallwespen. Verh. Zool.-Bot. Ver., Wien, **19**: 325–370.
- HARTIG T. 1840. Ueber die Gallwespen. Z. Ent., Leipzig, **2**: 176–209.
- IONESCU M. A. 1957. *Cynipinae*. Fauna Republicii Populare Romine, Insecta, **9** (fasc. 2). București, 246 pp., 151 ff.



- KIERYCH E. 1979. Galasówkowate, *Cynipoidea*. Katalog fauny Polski, Część XXVI, zeszyt 2. Warszawa, 103 pp.
- MAYR G. L. 1972. Die Einmiethler der mitteleuropäischen Eichengallen. Verh. Zool.-Bot. Ges., Wien, 22: 669–726.
- QUINLAN J. 1978. *Xystus testaceus* HARTIG, 1841 and *Synergus variabilis* MAYR, 1873 redefined and redescribed (*Hymenoptera: Cynipoidea*). Z. österr. Ent.-Ver. Wien, 30: 71–74, 6 ff.
- TAVARES J. (SILVA DA). 1920. Synergariae ou Les Cynipides commensaux d'autres Cynipides dans la Peninsule Iberique. Mem. Soc. Portug. Sci. Nat., Ser. Zool., Lisbonne, 4, VIII + 75 pp., 2 tt.
- WELD L. H. 1952. *Cynipoidea (Hym.) 1905–1950*. Ann Arbor (Michigan), 351 pp., 224 ff.

Instytut Zoologii PAN  
00-679 Warszawa, Wilcza 64

---

#### STRESZCZENIE

[Tytuł: Uwagi o rodzaju *Saphonecrus* DALLA TORRE et KIEFFER, 1910 (*Hymenoptera, Cynipidae*)]

Dwa okazy *Saphonecrus undulatus* (MAYR) przechowywane w Naturhistorisches Museum w Wiedniu błędnie przyjęto za okazy typowe, lektotyp i paralektotyp, gatunku *Synergus variabilis* MAYR. W konsekwencji redeskrpcja gatunku *S. variabilis* MAYR, zamieszczona w pracy QUINLANA (1978), jest również błędna. Nie odnosi się ona do żadnego gatunku opisanego przez MAYRA (1872).

Zdaniem autora takson komornic z otwartą komórką radialną, *Saphonecrus* D. T. et KIEFFER, powinien być uznany tylko za podrodzaj rodzaju *Synergus* HAETIG. Zagadnienie wymaga jednak szczegółowych badań, zwłaszcza gatunków amerykańskich.

---

#### РЕЗЮМЕ

[Заглавие: Замечания относительно рода *Saphonecrus* DALLA TORRE et KIEFFER, 1910 (*Hymenoptera, Cynipidae*)]

В Естественно-историческом музее в Вене хранятся два экземпляра *Saphonecrus undulatus* (MAYR), ошибочно обозначенные как типовые экземпляры — лектотип и паралектотип, вида *Synergus variabilis* MAYR. В результате редескрипция вида *S. variabilis* MAYR, помещенная в работе Квинляна (QUINLAN 1978) также ошибочна. Не касается она ни одного из видов, описанных Майером (MAYR 1872).

По мнению автора таксон орехотворок с открытой радиальной ячейкой, *Saphonectrus* D. T. et KIEFFER, должен быть признан только лишь за подрод в роде *Synergus* HARTIG. Этот вопрос требует, однако, подробных исследований, особенно американских видов.

---