

Eugeniusz KIERYCH

Notes on the genera *Dilyta* FÖRSTER, 1869, and *Glyptoxysta* THOMSON, 1877  
(Hymenoptera, Cynipoidea, Alloxystidae). Part I.

[With 14 figures in the text]

There is very little information on species included into the genera *Dilyta* FÖRSTER and *Glyptoxysta* THOMSON. The opinion that they are different among the *Alloxystidae* HELLÉN, 1931 (= *Charipinae* DALLA TORRE et KIEFFER, 1910, et auctorum) is hardly recognized. They were first referred to the genus *Dilyta* by FÖRSTER (1869) and later included into the genus *Alloxysta* FÖRSTER, 1969 by DALLA TORRE and KIEFFER (1910). The generic name *Dilyta*, though prior to *Alloxysta* (FÖRSTER, 1869, p. 340) was considered a synonym of the latter. Their being distinguished, once again and quite independently, in the genus *Charips* HALID. by HALIDAY (HALIDAY in MARSHALL 1970) was not approved of either<sup>1</sup>. The species on the basis of which HALIDAY distinguished the genus has been included by DALLA TORRE and KIEFFER (1910) into the genus *Allotria* WESTWOOD, 1833 (= *Xystus* HARTIG, 1840, partim) which has a different body structure and comprises many species. However, the name *Charips* was kept because *Allotria* and *Xystus* were preoccupied names. Only the third attempt at distinguishing them, this time made by THOMSON (1877), was approved of by KIEFFER (1902) and DALLA TORRE and KIEFFER (1910). The subgenus *Glyptoxysta* described by THOMSON has been included into the genus *Alloxysta* FÖRST.

KIEFFER's firm opposition to distinguishing this group of species was justified to a certain degree. The venation of the forewings was for KIEFFER

<sup>1</sup> The opinion that *Charips microcera* HALIDAY, 1870 is a species belonging to the genus *Dilyta* FÖRST. has been accepted by the author on the basis of the information from HELLÉN's study (1963).

the main criterion while distinguishing genera in the subfamily *Charipinae* DALLA TORRE et KIEFFER, 1910 among species with normally formed wings. That feature is easy to notice, but of questionable systematic value. KIEFFER included into the genus *Alloxysta* FÖRST. all species with the open radial cell. Other differences in the body structure were not very important. One may presume that, in the course of compiling a monograph of the world *Cynipoidea*, DALLA TORRE and KIEFFER devoted little time to direct studies on the materials of gall-wasps, and based their information on the contemporary literature.

The opinion of DALLA TORRE and KIEFFER (1910) concerning the genera *Dilyta* FÖRST., *Charips* HALID. and *Glyptoxysta* THOMS. has been adopted by the majority of scientists working later, with only one modification — the subgenus *Glyptoxysta* THOMS. has been raised to a genus (WELD 1952, IONESCU 1969).

HELLÉN (1958) devoted his study to the genus *Dilyta* FÖRST. In it he motivated the necessity of returning to the generic name *Dilyta* FÖRST. and placing under this name these species of the body structure such as in *Dilyta subclavata* FÖRSTER, 1869. However, HELLÉN treated the genus *Dilyta* FÖRST. in a broad sense and in his studies (HELLÉN 1958, 1963) he considered species of *Dilyta* FÖRST. and *Glyptoxysta* THOMS. as belonging to one genus, and the name *Glyptoxysta* THOMS. was for him a synonym of the name *Dilyta* FÖRST. HELLÉN's point of view (1958, 1963) was undoubtedly influenced by data from the literature, mainly the interpretation of the genus *Glyptoxysta* in WELD's paper (1952). Those data, however, are not explicit. THOMSON (1877), under a description of the subgenus, put two species: a formerly described *Glyptoxysta xanthocephala* (THOMS.) (*Allotria xanthocephala* THOMSON, 1862) and *G. heterocera* THOMS. described simultaneously with the subgenus. The characteristics of the body structure considered in the paper indicate that the description was made only on the basis of the former species, without a detailed analysis of the body structure of the latter. Yet, it was the latter species, *A. heterocera* THOMS., that was designated by ASHMEAD (1903) to be the type-species of the genus *Glyptoxysta* THOMS. Though its body structure does not correspond to the description of the genus, it is a species belonging to the genus *Dilyta* FÖRST. WELD (1952), characterizing the genus *Glyptoxysta* THOMS. took into consideration only the type-species *A. heterocera* THOMS. Therefore it was possible for him to write in his paper (WELD 1952, p. 254) that he had failed to notice the character "tergite III longer than tergite II", since that species has the 2nd and 3rd abdominal tergites completely fused without any suture.

ROHWER and FAGAN (1917) were the scientists who carried out the second designation of the type-species *Allotria xanthocephala* THOMSON, 1862 for the genus *Glyptoxysta* THOMS., which corresponds to the description of the genus (3rd tergite of the abdomen longer than 2nd one). This designation, however, is not consistent with the rules of the zoological nomenclature and it

should not be taken into consideration without a decision of the International Commission on Zoological Nomenclature.

In 1975, I had an opportunity to study the collection of *Cynipoidea* from the Museum of the Zoological Institute of the Academy of Science of USSR in Leningrad and, in 1977, the collection in the Zoological Museum of the Humboldt University in Berlin. Both in Leningrad and Berlin I paid particular attention to materials of species from the genus *Dilyta* FÖRST. sensu HELLÉN (1958, 1963). I have also studied in detail specimens of *Dilyta xanthocephala* (THOMS.) and *D. Subclavata* FÖRST. determined by Professor W. HELLÉN which I have borrowed from the Zoological Museum of the University in Helsinki. I have examined material of this group of species found in the collection of the Institute of Zoology of the Polish Academy of Sciences in Warsaw. As a result of these studies I have concluded that *Dilyta* FÖRSTER, 1869 and *Glyptoxyta* THOMSON, 1877 are two different genera. *Allotria xanthocephala* THOMSON, 1877 should be the type-species of the genus *Glyptoxyta* THOMS. *A. xanthocephala* THOMS. corresponds satisfactorily to the description of the genus *Glyptoxyta* THOMS., especially if the structure of the abdomen is taken into consideration.

It must be left to the International Commission on Zoological Nomenclature to decide whether *A. xanthocephala* THOMS. should be the type-species for *Glyptoxyta* in order to maintain the name *Glyptoxyta* THOMS., and thereby the designation of *A. heterocera* THOMS., made by ASHMEAD (1903), should be invalidated. In the case when the type-species *A. heterocera* THOMS. is left, which would mean that the names *Dilyta* FÖRST. and *Glyptoxyta* THOMS. would have to be synonymized, there should be found a name for a genus including species with the type of structure such as in *G. xanthocephala* (THOMS.).

The differences in the body structure of the species belonging to both genera may generally be as given below.

#### The genus *Dilyta* FÖRSTER, 1869

Type-species: *Dilyta subclavata* FÖRSTER, 1869.

Keels on the pronotum very clearly developed, arched, reaching the hind margin (Fig. 1). Carinae of the propodeum arched outside towards the lateral edges of the propodeum (Fig. 2). 2nd tergite of the abdomen entirely fused with 3rd tergite, the suture between them invisible, both tergites form one large tergite covering all the abdomen (especially in specimens that had been dried) (Fig. 3). The radial cell open, 3rd of the subcostal vein hardly marked, 2nd abscissa of the radial vein not reaching the margin of the wing (Fig. 4). The terminal segments of the antennal flagellum of the female considerably thicker than the basal segments, segments 4-6 of the antennae considerably shorter

than the successive ones (Fig. 5). The antennae of the male filiform, 3rd segment slightly arched and sinuately curved, segments 4 or 4 and 5 considerably shorter than the successive ones (Fig. 6, 7).

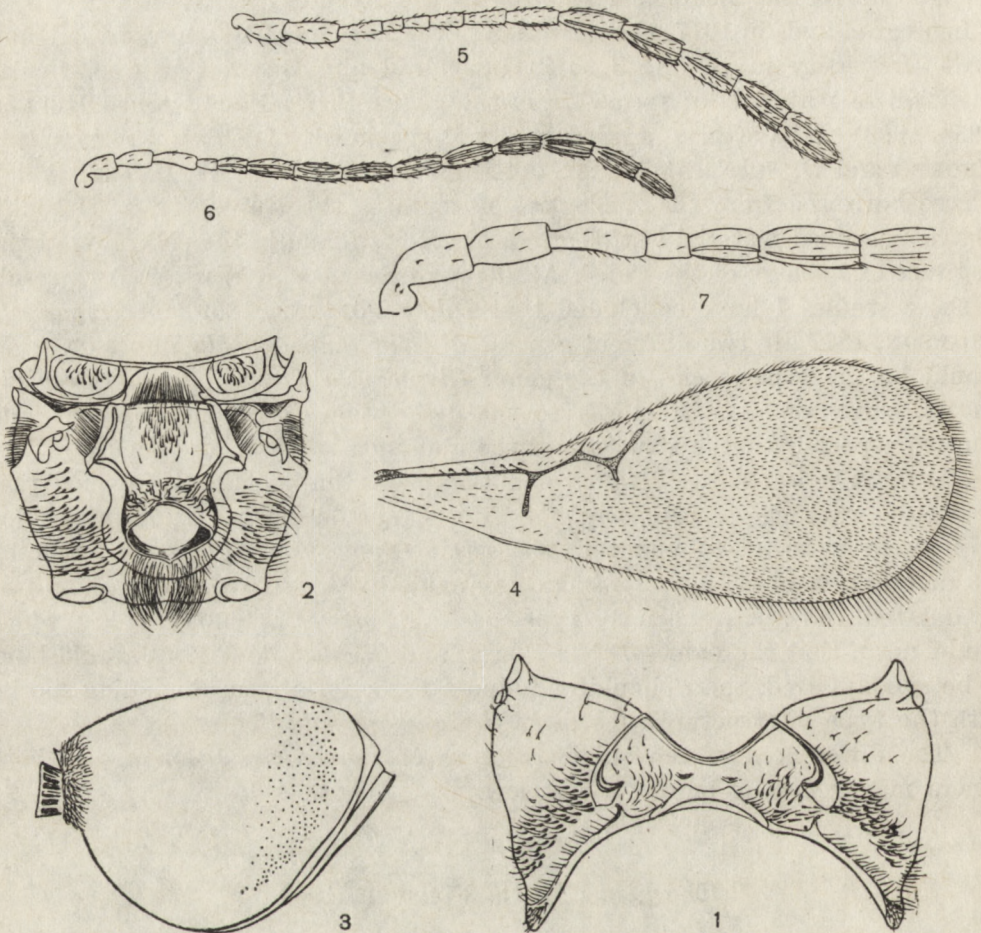


Fig. 1-7. *Dilyta subclavata* FÖRST. 1 - pronotum, 2 - metanotum and propodeum (carinae on propodeum), 3 - abdomen, 4 - fore wing, 5 - antenna of the female, 6 - antenna of the male, 7 - basal segments of the antenna of male.

The type-specimen of *D. subclavata* FÖRST. has probably been lost or, at any rate, is has not so far been recovered in the collections of the Zoological Museum of the Humboldt University in Berlin where the collection of A. FÖRSTER is kept<sup>1</sup>. There is no doubt, however, which group of species FÖRSTER (1869) distinguished in the genus *Dilyta* FÖRST. This is sufficiently proved by two other species distinguished by FÖRSTER, the descriptions of which have not been published, but specimens of them have been preserved in the collection.

<sup>1</sup> The type-specimen of *Dilyta subclavata* FÖRST. is housed in the Vienna museum.

The figures included in this paper have been made on the basis of specimens corresponding to the description of the species. They have been collected in Poland: ♀ — Warszawa-Radość, 24 VIII 1960, leg. E. KIERYCH, ♂ — Warszawa-Bielany, 10 IX 1959, leg. E. KIERYCH.

The genus *Glyptoxysta* THOMSON, 1877

Type-species: *Allotria xanthocephala* THOMSON., 1862 (see the introduction).

Carinae on the pronotum poorly developed, almost straight, not reaching the hind margin of it (Fig. 8). Carinae on the propodeum straight (Fig. 9), 2nd tergite of the abdomen clearly marked, short, 3rd tergite long, covering

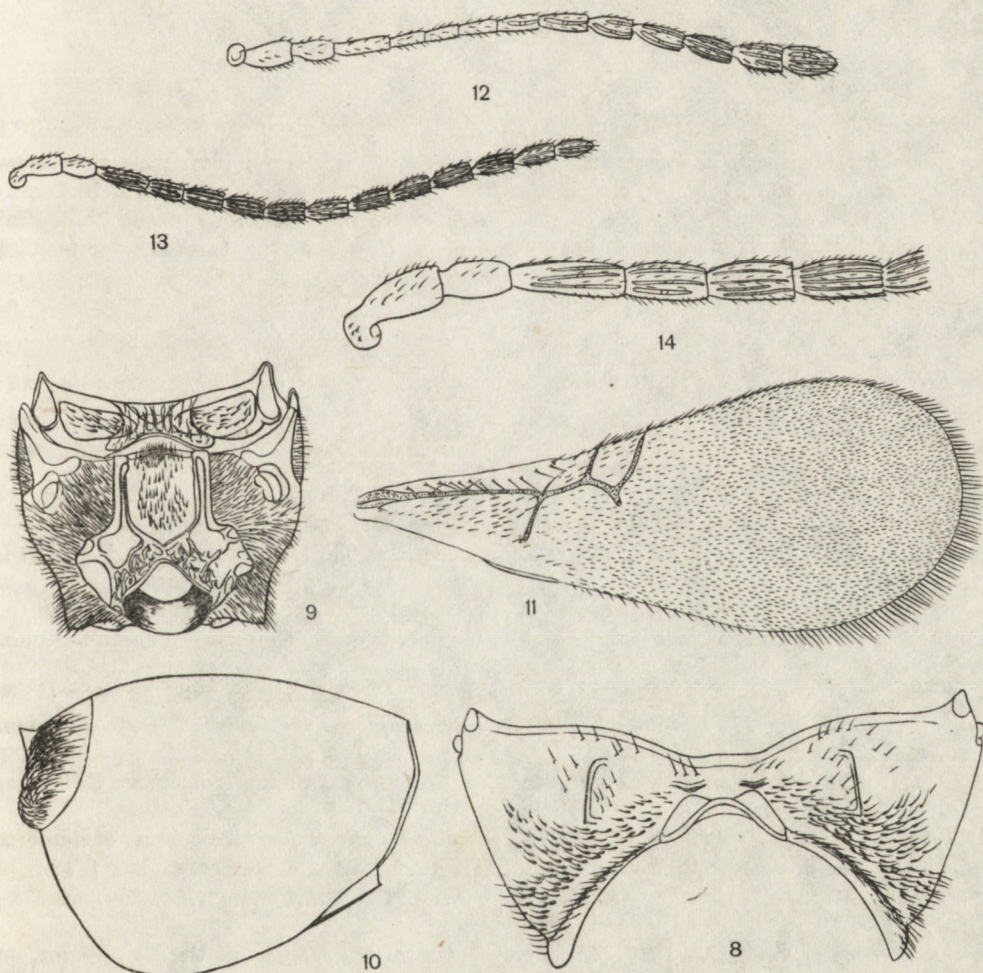


Fig. 8-14. *Glyptoxysta xanthocephala* (THOMS.). 8 — pronotum, 9 — metanotum and propodeum (carinae on propodeum), 10 — abdomen, 11 — fore wing, 12 — antenna of the female, 13 — antenna of the male, 14 — basal segments of the antenna of male.

a considerable part of the abdomen (Fig. 10). The radial cell open, 3rd abscissa of the subcostal vein and 2nd abscissa of the radial vein almost reaching the anterior margin of the wing (Fig. 11). The terminal segments of the antennal flagellum in female thicker than the basic ones, segments 4–6 demonstrate no considerable shortening in relation to the successive, segments (Fig. 12). The antennae of the male filiform, 3rd segment straight with no sinuate curving, the structure of segments 4 and 5 similar to that of the successive ones (Fig. 13 and 14).

The figures presented in this paper have been made on the basis of specimens of *G. xanthocephala* (THOMS.) collected in Poland in Puszcza Kampinoska: ♀ — Roztoka, 23 IX 1960, leg. E. KIERYCH, ♂ — Łomna-Las, 19 VII–3 VIII 1976, leg. E. KIERYCH.

#### Acknowledgements

I would like to express my gratitude to Dr. V. I. TOBIASOV for giving me the access to the collections in the Zoological Institute of the Academy of Sciences of USSR in Leningrad, to Dr. E. KÖNIGSMANN for giving me the access to the collections in the Zoological Museum of the Humboldt University in Berlin and to Professor W. HACKMAN for lending me the materials from the Zoological Museum of the University in Helsinki.

---

#### REFERENCES

- ASHMEAD W. H. 1903. Classification of the Gall-Wasps and Parasitic Cynipoids or the Superfamily *Cynipoidea*. III. Psyche, Cambridge, Mass., **10**: 140–155.
- DALLA TORRE K. W., KIEFFER J. J. 1910. *Cynipidae*. Das Tierreich, **24**, Berlin, XXXV + 891 pp., 422 ff.
- FÖRSTER A. 1869. Ueber die Gallwespen. Verh. zool.-bot. Ver., Wien, **19**: 325–370.
- HELLÉN W. 1931. Zur Kenntnis der Cynipiden Fauna Islands. Göteborg. Vetensk. Samh. Handl., 5 B, Göteborg, **2**, 5: 8.
- HELLÉN W. 1958. Was ist *Dilyta subclavata* FÖRST.? Notul. ent. Helsingfors, **38**: 64.
- HELLÉN W. 1963. Die Alloxytinen Finnlands (*Hymenoptera: Cynipidae*). Fauna Fennica, **15**. Helsinki, 23 pp.
- IONESCU M. A. 1969. *Hymenoptera, Cynipoidea*. Fauna Republicii Socialiste România, Insecta. **9** (fasc. 6), București, 290 pp., 86 ff.
- KIEFFER J. J. 1902. Description de quelques Cynipides nouveaux on peu connus et de deux de leurs Parasites (Hyménoptères). Bull. Soc. Hist. Nat., Metz, Ser. **2**, **10**: 1–18.
- MARSHALL T. A. 1870. On Some British *Cynipidae*. Ent. monthly Mag., London, **6**: 178–181.
- ROHWER S. A., FAGAN M. M. 1917. The Type-species of the Genera of the *Cynipoidea*, or the Gall Wasps and Parasitic Cynipoids. Proc. U. S. Nat. Mus., Washington, **53**: 357–380.
- THOMSON C. G. Försök till uppställning och beskrifning af Sveriges Figiter. Ofv. Kongl. Vet. Akad. Förh., Stockholm, **18**: 409.

- THOMSON C. G. 1877. Öfversigt of Sveriges *Cynips*-Arter., Opusc. Ent., Trelleborg, 3: 778–820.
- WELD L. H. 1952. *Cynipoidea* (Hym.) 1905–1950. Ann Arbor (Michigan), 351 pp., 224 ff.
- WESTWOOD J. O. 1833. Notice of the Habits of a Cynipideous Insect, parasitic upon the Rose Luse (*Aphis rosae*), with Descriptions of several other parasitic *Hymenoptera*. Mag. Nat. Hist., London, 6: 491–497.

Instytut Zoologii PAN,  
ul. Wilcza 64  
00-679 Warszawa

## STRESZCZENIE

[Tytuł: Uwagi o rodzajach *Dilyta* FÖRSTER, 1869 i *Glyptoxysta* THOMSON, 1877 (*Hymenoptera*, *Cynipoidea*, *Alloxystidae*). Część I]

*Dilyta* FÖRSTER, 1869 i *Glyptoxysta* THOMSON, 1877 są dwoma odrębnymi rodzajami. O ich odrębności świadczą różnice w budowie ciała gatunków, które powinny być zamieszczone w tych rodzajach. Opis rodzaju *Glyptoxysta* dokonany przez THOMSONA (1877) jest dostatecznie jasny. Gatunkiem typowym dla tego rodzaju powinien być *Allotria xanthocephala* THOMSON, 1862, wyznaczony przez ROHWERA i FAGAN (1917). Wcześniejsze wyznaczenie gatunku typowego *Allotria heterocera* THOMSON, 1877, dokonane przez ASHMEADA (1903) należałoby uznać za nieważne. *A. heterocera* THOMS. nie odpowiada opisowi rodzaju *Glyptoxysta* THOMS. i jest gatunkiem należącym do rodzaju *Dilyta* FÖRST.

Decyzję uznania za ważne wyznaczenie gatunku typowego *A. xanthocephala* THOMS. w celu utrzymania nazwy *Glyptoxysta* THOMS. i unieważnienia wyznaczenia gatunku typowego *A. heterocera* THOMS. należy pozostawić Międzynarodowej Komisji Nomenklatury Zoologicznej. W przypadku utrzymania w mocy gatunku typowego *A. heterocera* THOMS., należy utworzyć nazwę dla rodzaju, w którym znalazłyby się gatunki o typie budowy ciała, jaką ma *A. xanthocephala* THOMS., a nazwę *Glyptoxysta* THOMS. uznać za synonim nazwy *Dilyta* FÖRST.

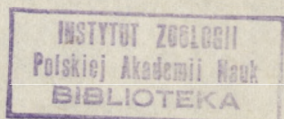
## РЕЗЮМЕ

[Заглавие: Замечания относительно родов *Dilyta* FÖRSTER, 1869 и *Glyptoxysta* THOMSON, 1877 (*Hymenoptera*, *Cynipoidea*, *Alloxystidae*). Часть I]

*Dilyta* FÖRSTER, 1869 и *Glyptoxysta* THOMSON, 1877 являются двумя самостоятельными родами. Свидетельствуют об этом различия в строении тела видов, которые

должны быть отнесены к этим родам. Описание рода *Glyptoxysta*, произведенное Томсоном (1877), является достаточно четким. Типовым видом этого рода должен быть *Allotria xanthocephala* THOMSON, 1862, обозначенный Ровером и Фаганом (1917). Более раннее обозначение *Glyptoxysta heterocera* THOMSON, 1877 в качестве типичного вида, произведенное Ашмедом (1903), следовало бы считать недействительным. *A. heterocera* THOMS. не соответствует описанию рода *Glyptoxysta* THOMS. и является видом, принадлежащим к роду *Dilyta* FÖRST.

Решение относительно того считать ли действительным обозначение типового вида *A. xanthocephala* THOMS. с целью сохранения названия *Glyptoxysta* THOMS. и объявления недействительным обозначение типового вида *G. heterocera* THOMS. следует предоставить Международной Комиссии по зоологической номенклатуре. Если будет сохранен в силе как типовый вид *A. heterocera* THOMS., то следовало бы создать название для рода, в котором были бы уместены виды, тип строения тела которых был бы таков, как у *A. xanthocephala* THOMS., а название *Glyptoxysta* THOMS. признать синонимом название *Dilyta* FÖRST.



Redaktor pracy — prof. dr J. Nast

Państwowe Wydawnictwo Naukowe — Warszawa 1979  
Nakład 990 + 90 egz. Ark. wyd. 0,75; druk. 0,5. Papier druk. sat. kl. III, 80 g. B1. Cena zł 10, —  
Zam. 122-78 — A-15 — Wrocławska Drukarnia Naukowa

ISBN 83-01-00329-4  
ISSN 0003-4541