

Eugeniusz KIERYCH

Notes on the genera *Dilyta* FÖRSTER, 1869 and *Glyptoxyta* THOMSON,
1877 (Hymenoptera, Cynipoidea, Alloxytidae). Part II.
Dilytinae subfam. n.

[With 15 figures]

In the first part of the present study (KIERYCH, 1979) there have been discussed differences in the body structure of species belonging to the genera *Dilyta* FÖRST. and *Glyptoxyta* THOMS. It has been proved that it is justified to distinguish these two genera and that it is proper to keep the generic name *Glyptoxyta* THOMSON, 1877.

A further analysis of the body structure of that group of *Cynipoidea* and a comparison of this structure with the body structure of the other *Alloxytidae* has led to a conclusion that two taxa of equal value should be distinguished within this family. On the basis of the character of differences the author has distinguished taxa at the subfamily level. The new subfamily has been given a name derived from the former generic name *Dilyta* FÖRSTER, 1869.

Alloxytidae HELLÉN, 1931¹*Allotrina* THOMSON, 1862 (subfamily in the family *Figitidae*).*Allotriioideae*, FÖRSTER, 1869 (family).*Allotriinae* DALLA TORRE, 1893.*Charipinae* DALLA TORRE et KIEFFER, 1910.*Charipinae*: WELD 1952.*Alloxytinae* HELLÉN, 1931.

¹ The systematic position of this group of zoophagous gall-flies within the superfamily *Cynipoidea* will be discussed in a separate paper.

P255

Small insects, 0.8–2.5 mm long. The surface of the body usually without sculpture, smooth, shining, with scanty pubescence. The head, seen from the front, transversely or longitudinally oval, sometimes its shape is similar to a triangle. The eyes of medium size, longitudinally oval or with a concave lateral edge, usually convex, in some species very slightly convex. The face slightly convex, the clypeus defined by the epistomal suture, in some species the epistomal suture is indistinct. The frons without frontal carinae, the ocelli well developed, distributed in a triangle. The mandibles with three or two teeth. The maxillary palpi four-segmented, the labial palpi three-segmented. The antennae of the female thirteen- and of the male fourteen-segmented; in some species the twelfth and thirteenth segments of the antennae of the female are indistinctly separated, fused and then the antennae are of 12 segments, filiform and slightly clavate. The basic segments of the flagellum of the antennae most modified in respect of shape and proportion. The 3–6 segments of the antennae of the male flat or archwise curved and sinuately incised. The foramen magnum at different levels of the head. The pronotum without or with longitudinal, variously developed carinae and pits. The mesoscutum usually with a smooth and shining surface, in species belonging to the genus *Hemicrisis* FÖRSTER with a fine sculpture and punctation, with parapsidal furrows, antero-admedian lines and lateral lines developed to different extent or, most frequently, with none at all. The mesoscutum distinctly separated from the scutellum forming separate plates. At the base of the scutellum a transverse depression or two foveae, sometimes only one. The shape of the scutellum modified. The propodeum without or with two variously developed longitudinal carinae. The mesopleures smooth and shining, most frequently without but in some species with a longitudinal furrow. The femur with a poorly distinguished trochantellus. The claws on the last tarsal segment without any tooth at the base. The wings usually fully developed; in some species reduced. The radial cell of the fore wing of a changing shape, the veins surrounding it distinct or reduced to a different extent. The abdomen set on a short petiole, oval, sometimes more laterally compressed and elongated. Particular tergites and sternites of various length, usually smooth, in some species punctate. The 2nd tergite of the abdomen always with a pubescent ring at the base.

At the larval stage most species live in larvae of aphid parasitoids, mainly from the family *Aphidiidae*, sometimes also from the family *Aphelinidae*. Certain species were also obtained from *Psylloidea*.

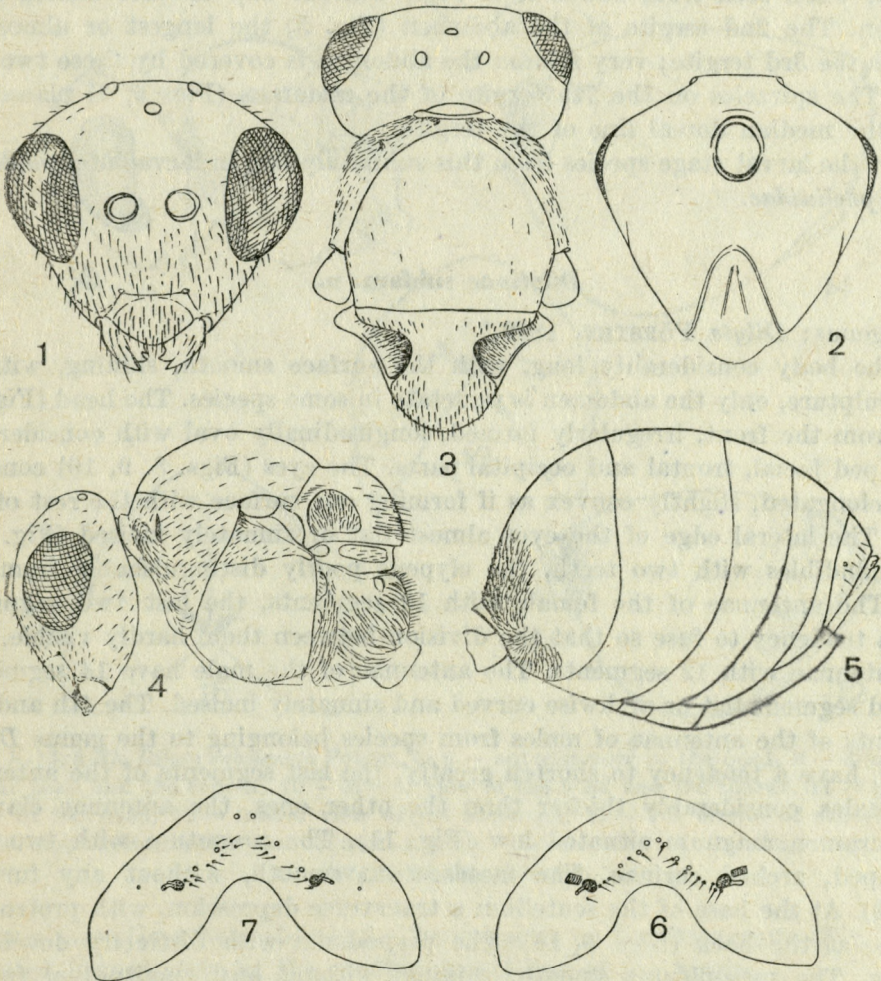
Little is known about the geographic distribution of the above species.

Alloxystinae HELLÉN, 1931

Type-genus: *Alloxysta* FÖRSTER, 1869.

The body robust, with its surface usually smooth and shining, only in species from the genus *Hemicrisis* FÖRST. with a sculpture. The head (Fig. 1),

seen from the front, transversely or longitudinally oval, sometimes its shape is similar to a triangle. The eyes of medium size, almost round or longitudinally oval, convex, protruding considerably above the surface of the head, with the lateral edge flat or archwise convex. The mandibles with three teeth, the clypeus distinctly separated from the face by furrows. The antennae of the female definitely of 13 segments, the last two segments separated, with no tendency to fuse. The 3-6 segments of the antennae of the male — of modified structure, flat or archwise curved, often with a sinuate incision. The



Figs 1-7. 1-6. *Alloxyta macrophadna* (HART.), ♀: 1 — anterior view of the head, 2 — posterior view of the head, 3 — dorsal view of the head and the thorax, 4 — lateral view of the head and the thorax, 5 — lateral view of the abdomen, 6 — 7th tergite of the abdomen., 7 —

Phaenoglyphis xanthochroa FÖRST., ♀, the 7th tergite of the abdomen.

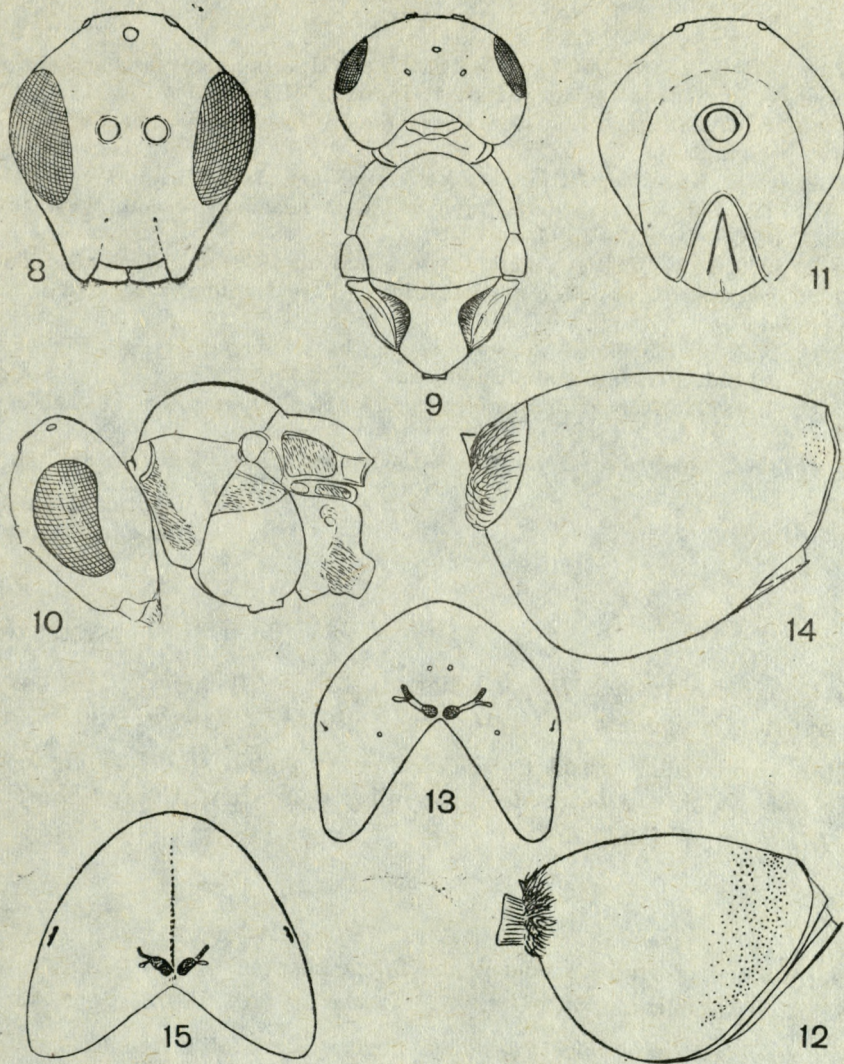
pronotum with two longitudinal carinae, developed to various degrees, or with no carinae at all. The mesoscutum smooth, with no furrows and carinae or with furrows and carinae differently marked. At the base the scutellum with a transverse depression or two, sometimes with one fovea; the back of the scutellum falling gently without any protruding carinae (Fig. 4). The propodeum without or with two longitudinal carinae. The mesopleures smooth, shining, with no longitudinal furrow (Fig. 4) or with one. The wings developed normally or reduced to various extent. The radial cell closed or open, in some species with reduced wings it is not marked at all. The abdomen set on a short petiole, when seen from above it is oval, without any distinct lateral compression. The 2nd tergite of the abdomen (Fig. 5) the longest or almost as long as the 3rd tergite; very seldom the abdomen is covered by these two tergites. The spiracles on the 7th tergite of the abdomen (Figs 6, 7) placed far from the median dorsal line of the tergite.

At the larval stage species from this subfamily live in larvae of *Aphidiidae* and *Aphelinidae*.

Dilytinae subfam. n.

Type-genus: *Dilyta* FÖRSTER, 1869.

The body considerably long, with the surface smooth, shining, without any sculpture, only the abdomen is punctate in some species. The head (Fig. 8), seen from the front, irregularly formed, longitudinally oval with considerably developed facial, frontal and occipital parts. The eyes (Figs. 8, 9, 10) considerably elongated, slightly convex as if forming one surface with the rest of the head. The lateral edge of the eyes almost flat or sinuately incised (Fig. 10). The mandibles with two teeth, the clypeus poorly distinguishable from the face. The antennae of the female with 13 segments, the last two segments with a tendency to fuse so that the division between them hardly visible, and the antennae with 12 segments. The antennae of the male have 14 segments, the 3rd segment flat or archwise curved and sinuately incised. The 4th and 5th segments of the antennae of males from species belonging to the genus *Dilyta* FÖRST. have a tendency to shorten greatly, the last segments of the antennae of females considerably thicker than the other ones, the antennae clavate. The foramen magnum situated low (Fig. 11). The pronotum with two well developed, arched carinae. The mesoscutum smooth, without any furrows (Fig. 9). At the base of the scutellum a transverse depression, with protruding carinae at the back (Figs. 9, 10). The propodeum with distinctly developed carinae. The mesopleures smooth, shining, without any longitudinal furrow (Fig. 10). The wings developed normally, the radial cell open. The abdomen (Figs. 12, 14) set on a short petiole, and laterally compressed when seen from above. The 2nd tergite of the abdomen very short, fused with the 3rd tergite, the suture between them maintained (Fig. 14) or not (Fig. 12). The two tergites



Figs 8-15. 8-13. *Dilyta subclavata* FÖRST., ♀: 8 - anterior view of the head, 9 - dorsal view of the head and the thorax, 10 - lateral view of the head and the thorax, 11 - posterior view of the head, 12 - lateral view of the abdomen, 13 - 7th tergite of the abdomen. 14-15. *Glyptoxyista xanthocephala* (THOMS.), ♀: 14 - lateral view of the abdomen, 15 - 7th tergite of the abdomen.

cover almost the whole abdomen. The spiracles on the 7th tergite (Fig. 13, 15) situated immediately at the median dorsal line of the tergite.

Little is known about the biology of the above species. They were obtained from *Psylloidea*. However, it is not clear whether *Psylloidea* are their immediate hosts or whether they live in larvae of other *Hymenoptera* attacking *Psylloidea*.

LITERATURE

- DALLA TORRE C. G. 1893. *Cynipidae*. In: *Catalogus Hymenopterorum hucusque descriptorum systematicus et synonymicus*, 2, Lipsiae, VIII + 140 pp.
- DALLA TORRE K. W., KIEFFER J. J. 1910. *Cynipidae*. In: *Das Tierreich*, 24. Berlin, XXXV + 891 pp., 422 ff.
- FÖRSTER A. 1869. Ueber die Gallwespen. *Verh. zool.-bot. Ver. Wien*, 19, pp. 325-370.
- HELLÉN W. 1931. Zur Kenntnis der Cynipiden Fauna Islands. *Göteborg. Vetensk. Samh. Handl. B*, Göteborg, 2, pp. 1-8.
- KIERYCH E. 1979. Notes on the genera *Dilyta* FÖRSTER, 1869 and *Glyptoxysta* THOMSON, 1877 (*Hymenoptera, Cynipoidea, Alloxystidae*). Part I. *Annales zool.*, Warszawa, 34, pp. 453-460.
- THOMSON C. G. 1862. Försök till uppställning och beskrifning af Sveriges Figiter. *Öfvers. Vetensk. Akad. Förhandl.*, Stockholm, 18, pp. 395-420.
- THOMSON C. G. 1877. Öfversigt af Sveriges *Cynips*-Arten. *Opusc. Ent.*, Trelleborg, 8, pp. 778-820.
- WELD L. H. 1951. *Cynipoidea (Hym.) 1905-1950*. Ann Arbor, Michigan, 351 pp., 224 ff.

Instytut Zoologii PAN
Warszawa, Wileza 64

STRESZCZENIE

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

Autor wyodrębnia wśród *Cynipoidea* nową podrodzinę i zamieszcza uzupełniony opis rodziny *Alloxystidae* oraz opisy podrodzin *Alloxystinae* HELLÉN, 1931 i *Dilytinae* subfam. n.

РЕЗЮМЕ

[Заглавие: Замечания относительно родов *Dilyta* FÖRSTER, 1869 и *Glyptoxysta* THOMSON, 1877 (*Hymenoptera, Cynipoidea, Alloxystidae*). Частъ II. *Dilytinae* subfam. n.]

Автор выделяет из *Cynipoidea* новое подсемейство и приводит дополненное описание семейства *Alloxystidae* и подсемейств *Alloxystinae* HELLÉN, 1931 и *Dilytinae* subfam. n.

Redaktor pracy — prof. dr J. Nast

Państwowe Wydawnictwo Naukowe — Warszawa 1979
Nakład 970 + 90 egz. Ark. wyd. 0,5; druk. 3/8. Papier druk. sat. kl. III, 80 g. B1. Cena zł 10, —
Nr zam. 518/78 — Wrocławska Drukarnia Naukowa

ISBN 83-01-00337-5
ISSN 0003-4541

