# Contributions to the families Delphacidae and Cicadellidae (Homoptera) from Turkey

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#### Summary

This paper includes the description of a new species Eurybregma dlabolai sp.n. and previously unknown male of Euidopsis truncata Ribaut from the family Delphacidae and female of Diplocolenus bekiri Kalkandelen from the family Cicadellidae. The specimens were collected during the study of Turkish Auchenorrhyncha fauna. Type specimens are reserved in collection of Plant Protection Museum in Regional Plant Protection Research Institute, Kalaba - Ankara, Turkey.

#### Eurybregma dlabolai sp.n.

Vertex shorter than basal width, anterior margin convex at dorsal view (Fig. 1 A); frontal carinae very obscure, slightly diverging from base to the passage to vertex and extending parallel on vertex; clypeus black, except the median and lateral carinae of which pale in colour. Sides of clypeus also with two large black maculae at the basal; postclypeus with two long and large black stripes on basal half, on sides of frontal carinae; the third stripe linening between the frontal carinae, starting a little above the level of ocelli and extending up on the vertex, to the end of frontal carinae; two small, round and brown spots on the vertex, near the posterior margin; head including the eyes larger than pronotum. Pronotum with two parallel longitudinal stripes behind the spots of vertex, leaving clear the anterior margin of pronotum, continuing on the mesonotum as far as its posterior margin; pronotum also with dark stripes behind the extern corners of the eyes. Posterior half of vertex, between the stripes on pronotum and mesonotum bright and clear yellow in colour. Elytra are brachypterous reaching only to the middle of 5th tergite, the apical margin slightly but regularly curved. Venation can be seen and three light brown stripes extend longitudinally on the elytra (Fig. 1 B). The first one along the radial vein, the second between cubital vein and

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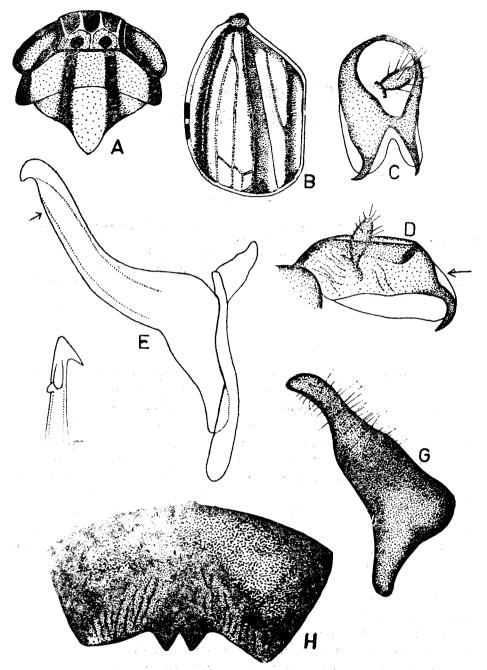


Fig. 1. Eurybregma dlabolai sp.n. (A - G) A - Head, pronotum and mesonotum of male; B- Elytron; C - Anal tube, posterior view; D - Anal tube, lateral view; E - Aedeagus, lateral view; G - Paramere; H - Pregenital sternite of female. Diplocolenus bekiri Kalkandelen.

claval suture, the third one is in the intern claval vein, forming the continuation of the stripe on pronotum and mesonotum. The first two stripes are close to each other at the base of elytra, behind the lateral bands of the pronotum. Abdomen also with two large, black bands on dorsum at each side of narrow light median stripe and continuing on pygofer. Lateral margins of abdomen light yellow in colour. Legs clear, except the last segment of tarsi are black.

Male genitalia : Anal tube high and narrow, not rounded, with two long, curved processes, extending ventrally and diverging moderately to the sides (Fig. 1 C,D). Paramers are divergent, generally black or dark brown in colour, acuminated at tips and light brown (Fig. 1 G). Acdeagus cylindrical, curved largely at the basal half. Gonopore ventral and subapical, with a small rounded, lobe-like denticle at the posterior margin of gonopore on left side (Fig. 1 E,F). At the apex of acdeagus with a sharp pointed triangle denticle on right side of gonopore, giving the apperance of a croche.

This species is very close to E. porcus Emelyanov, 1964, by the characters of male genitalia, especially the aedeagus. But this species differs from E. porcus Emel. by having long, divergent processes of anal tube and rounded small denticle at the left side of the posterior margin of gonopore, instead of short, convergent anal tupe processes and small pointed denticle at the left side of posterior margin of gonopore.

Measurements : Width of head, including eyes 0.99 mm, length of vertex 0.32 mm, width of vertex, at the narrowest level 0.45 mm, length of pronotum on median line 0.27 mm, width of pronotum, between the posterior corners of lateral margins 0.63 mm, length of mesonotum on median line 0.45 mm, length of elytron 1.17 mm, width of elytron 0.90 mm.

This species is described from a single male specimen, collected in Kars (Sarıkamış) 11.7.1970, in *Pinus* forest on weeds by the author.

I take pleasure in dedicating this species to Dr. J. Dlabola, of the National Museum (Natural History) in Prague, Czechoslovakia, who contributed greatly to Turkish Auchenorrhyncha fauna.

#### Euidopsis truncata Ribaut, 1948

Genus Euidopsis and the type species Euidopsis truncata Ribaut originally described by Ribaut (1948) from two female specimens from Cyprus. Ribaut pointed out the differences from the nearest genera Araeopides, now genus Perkinsiella and genus Euidella. He also figured head, face and antenna. Later Dlabola (1974) redescribed the genus and species, with additional material collected from Greece and Italy and gave figures of female abdomen, antenna and forewing. But still the male specimen was missing. The male specimen, described in this paper was found in Muğla (Dalaman), which is on the southwestern corner of Turkey, on the coast of Mediterranean.

Male - Macropterous, elytra greatly passing beyond the abdomen. Elytron is as seen in figure 2 A. A large, dark brown band covering the wing almost completely, leaving the anterior margin and basal half of the commissural margin clear and transparent. Intermediare apical cell has a large, rounded light spot. The spot in externe apical cell is much smaller. Veins are dark brown and conspicuously granulated, only the externe apical vein is clear, but the granules could be seen. Vertex (Fig. 2 A) in form of trapez, lateral margins diverging posteriorly. Vertex is clear yellow on disc. Lateral frontal carinae of face are sinuated exteriorly at the passage to vertex, making an enlargement, then continuing parallel to the base. The median frontal carina forked a little above the ocelli, branches extending parallel on face, diverging on vertex. Pigmentation of face resembles to that of female, according to the description of Dlabola (1974). Face with a large, transverse clear band below the antenna. Basal and upper part of the face black in colour. A clear line at the point of furcation of median carina, but not reaches to the lateral frontal carinae. The small clear dots on the lateral carinae, one at the same level of transverse line and the other a little below it. Three pairs of small clear dots placed at the externe sides of the branches of median carina. Clypeus black in colour, median carina is clear at the basal half. Basal segment of antenna is slightly depressed, second segment is two times longer than basal segment. Both segment black in colour and having a small light spot near their base. Pronotum is clear yellow between the lateral carinae and black pigmented at sides , as seen in figure 2 A. Mesonotum as long as about three times of pronotum and black pigmented at sides of lateral carinae, as in pronotum. Tegulae also black pigmented. Femura are dark colour, tibiae light colour in legs.

Male genitalia : Pygofer (Fig. 2 G) has a median process on ventral side. The posterior margin of the process excavated 'V' shape largely, so the outline resembles to 'M'. Parameres (Fig. 2 F) are small, distal part abruptly narrowed, like a finger and bend at 90° angle to the basal part. Anal tube has two long apophyses on the ventral, extending parallel to each other (Fig. 2 C), acuminated at tips. Aedeagus, in lateral view (Fig. 2 E) curved slightly to posterior, has an apophyse, as long as one third of aedeagus, forked on apical half (Fig. 2 D). The branches of apophyse form an acute angle between them. Gonopore apical and on posterior face of aedeagus.

Measurements : Total length (from apex of vertex to apical margin of fore wing) 4,06 mm; width of head including eyes 0.95 mm, length of vertex 0.27

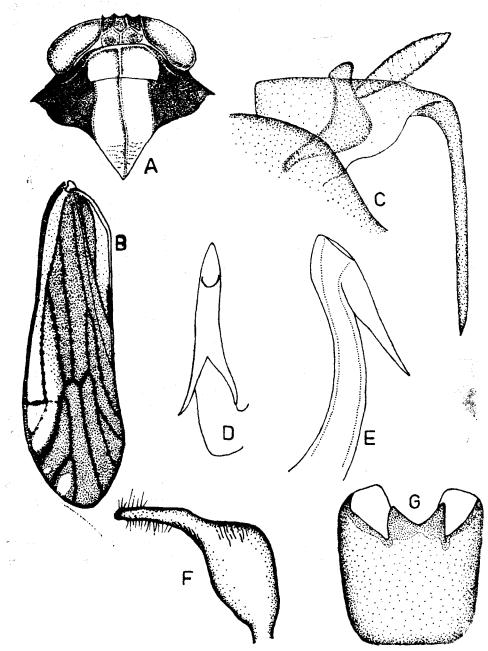


Fig. 2. Euidopsis truncata Ribaut : A - Head, pronotum and mesonotum of male;
B - Elytron; C - Anal tube, lateral view; D - Aedeagus, posterior view; E - Aedeagus, lateral view; F - Paramere, latero-ventral view;
G - Pygofer, ventral view.

mm, width of vertex at the narrowest level between eyes 0,27 mm, length of pronotum 0,23 mm, width of pronotum 0,63 mm, length of mesonotum 0,63 mm.

The description is made from the specimen collected from Muğla (Dalaman) 8.11.1976, by Dr. N. Aysev.

## Diplocolenus bekiri Kalkandelen, 1972

This species was previously described from single male specimen by the author. At the time, female was unknown. Now, female specimen is found and the original description is given below, including the measurements of holotype and additional two male specimens.

Female - Vertex about as long as the width of vertex. Anterior margin of vertex forms right angle, with rounded apex. Vertex slightly depressed on the disc, have smooth and bright surface. Face at postclypeus, anteclypeus and lorae are completely black in colour, leaving light band below the anterior margin of vertex as seen in the male (Kalkandelen, 1972 Fig. 1 B). Genae are dark brown at the median part and the rest of it is black. Surface of the face is finely granulated. Vertex, pronotum and scutellum are bright yellow. Fore wings are subbrachypterous, not covering the pygofer, greenish yellow in colour and opaque. Veins are obscure, seen with difficulty. Apical cells with narrow blackish band next to the apical margin, as in male. Hind wings are as long as fore wings and dark brown. Ventral of abdomen black in colour, with large light maculae at the lateral of each sternite.

Female pregenital sternite (Fig. 1 H) black in colour, excavated from the lateral to the median dent, which is bidenticulated, not reaching to the posterior level of lateral lobes. Median dent raised up and lateral lobes depressed and stridulated longitudinally near the posterior margin. Pygofer black at the ventral side, leaving light band at the ventral margin. Base of spines with yellow spots. Dorsum of pygofer also yellow in colour. Ovipositor as long as pygofer and black in colour.

Measurements : Total length of female is measured from the apex of vertex to the tip of pygofer, total length of male, which is macropterous, from apex of vertex to the apical margin of elytra.

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Measurements	♀ Allotype	J Holotype	2 Males
Total length	4,90 mm	4,05 mm	4,05 mm
Width of Head	1,40 mm	1,26 mm	1,23 mm
Length of Vertex	0,63 mm	0,54 mm	0,54 mm
Width of Vertex	0,72 mm	0,58 mm	0,58 mm
Length of Pronotum	0,54 mm	0,45 mm	0,45 mm
Width of Pronotum	1,30 mm	1,12 mm	1,12 mm
Length of Forewing	3,15 mm	3,10 mm	3,10 mm

Material examined : Sivas (Koyulhisar - Ortakent) 1 female (Allotype) and 2 male specimens, collected on 12.7.1978 by Doç. Dr. F. Önder, on weeds.

## Özet

# Türkiye'den Dolphacidae ve Clearlel'ideo (Homoptera) familyalarına katkılar

Bu makale, Delphacidae familyasından Eurybregma genusunun yeni bir türü E. dlabolai sp.n. ve şimdiye kadar tarif edilmemiş olan Euidopsis truncata Ribautnun erkeği ile Cicadellidae familyasından Diplocolenus bekiri Kalkandelen'in dişi tariflerini kapsamaktadır. Örnekler Türkiye Homoptera - Auchenorrhyncha faunasının tesbiti için yapılan toplamalar sırasında bulunmuştur. Type örnekler Bitki Koruma Müzesi kolleksiyonunda bulunmaktadır.

## Acknowledgements

The author would like to acknowledge with greatful thanks to Dr. J. Dlabola of the National Museum (Natural History) in Prague, Czechoslovakia, who gave chance of describing these specimens and contributed to the Turkish fauna. The author also would like to express her appreciations to Prof. Dr. N. Lodos of the Department of Entomology and Agricultural Zoology, Agricultural Faculty, Bornova - İzmir, for giving the specimens at her disposal.

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