REVIEW OF *PARADORYDIUM* KIRKALDY (HOMOPTERA, AUCHENORRHYNCHA, CICADELLIDAE) FROM TURKEY, WITH THE DESCRIPTION OF A NEW SPECIES¹

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ABSTRACT: The following species of *Paradorydium* are recorded from Turkey: *P. mustafai* sp.n., *P. occidentale* Lindberg (new record) and *P. paradoxum* (Herrick-Schaeffer). Taxonomical features and figures of the species are given.

KEY WORDS: *Paradorydium mustafai*, sp.n., Homoptera, Cicadellidae, Auchenorrhyncha, Turkey

*Paradorydium* is one of only four genera of the Old World leafhopper tribe Paradorydini (Linnavauri, 1979). The distinctive elongate shape (Fig. 1) of the members of this tribe has been likened to the seeds of the grasses on which they live. Sixteen species were recorded from Africa by Linnavauri (1979) and ten species from the Palaeartic region by Nast (1972), including *P. paradoxum* Herrick-Schaeffer). In the present work, two other species, *P. occidentale* Lindberg and *P. mustafai* sp. nov., are recorded from Turkey. All three species are described and a key for their separation.

**Key to the species of Paradorydium from Turkey**

1. Length of vertex approximately 6.5 X length of pronotum. Aedeagus with a pair of apical processes (Fig. 11) ................................................. *mustafai*
   - Length of vertex 4-5 X length of pronotum. Aedeagus without apical processes .................. 2
2(1) Aedeagus with a pair of basal processes (Fig. 33) .................................................. *paradoxum*
   - Aedeagus without a pair of basal processes (Fig. 21) ................................................. *occidentale*

*Paradorydium mustafai* sp. n. (Figs. 1-11)

Description: Length: male 8.8 - 9.7 mm, female 11.8 – 12.2 mm. Yellowish-green. Crown and hemelytra with fine brown punctation (only a female with red punctation). Face with distinct dark lateral bands. Veins of forewing brownish-yellow, granulated.

Crown (Figs. 3-4) tetrahedral in cross section, median, lateral and ventral carinae distinct; vertex 6.5 X as long as median length of pronotum, sides concave, apex pointed and curved dorsad, median carina reaching to apex. Hemelytra transparent with sharp apex, enclosing entire abdomen.

Male genitalia as in Figs. 6-11. Side lobes of pygophore insinuate apically. Subgenital plate with apical margin forming an inner process and an outer lobe. Stem of aedeagus elongate, slightly recurved dorsad, with falcate apical appendages.

Female genitalia as in Fig. 5.


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**Etymology:** The name of this new species is dedicated to my father Mustafa Demir.

**Remarks:** Similar to *P. dimorphum* Linnavanuori from Africa and *P. paradoxum*, in the shape of the subgenital plate but differs from the former species by its longer crown with sides concave and more elongate lateral lobe of the subgenital plate and from both species in having a pair of apical aedeagal processes.

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**Figs. 1-5.** *Paradorydium mustafai* sp. n., holotype male. 1. Habitus. Scale bar = 1.0 mm. 2. Left forewing. 3. Crown, dorsal view. 4. Crown, lateral view. 5. Paratype female, distal portion of abdomen, lateral view. Figures 2-5, scale bar = 0.5 mm.
Figs. 6-11. Male genitalia of *Paradorydium mustafai* sp. n., holotype male. 6. Genital capsule and anal tube, lateral view. 7. Same, ventral view. 8. Right style, dorsal view. 9. Connective, dorsal view. 10. Aedeagus, posterior view. 11. Aedeagus, lateral view. Scale bar = 0.1 mm.
Paradorydium occidentale Lindberg (Figs. 12-22)

Paradorydium occidentale Lindberg, 1954: 208, Figs. 51 l-m.


Crown (Figs. 14-15) tetrahedral in cross section, slightly flattened with apex slightly truncate; vertex 4-4.5 X as long as median length of pronotum (male and female respectively), median carina reaching to apex, lateral carinae more distinct than median carinae. Hemelytra transparent with slightly rounded apex enclosing entire abdomen.

Male genitalia as in Figs. 17-22. Side lobes of pygophore conical. Stem of aedeagus elongate, slightly recurved dorsad, without processes.

Female genitalia as in Fig. 16.

Material Studied: TURKEY: Southwest Anatolia, Antalya, Gazipaşa, Çalışnır, 25 m, 12.05.2001 23♂ 30♀, on Graminae. Antalya, Manavgat, Demirciler, 40 m, 11.05.2001 1♂, on Graminae.

Remarks: The specimens from Turkey (new record) were identified by reference to the original figures and by comparison (by M. D. Webb) with a male and female from Cape Verde Island determined by Lindberg as P. paradoxum, deposited in the Natural History Museum, London. The species was previously recorded from the Canary Islands.

Paradorydium paradoxum (Herrich-Schäffer) (Figs. 23-33)

*Jassus paradoxum* Herrich-Schäffer, 1837.

**Description:** Length: male 6.5 – 7.0 mm, female 7.4 – 8.2 mm. Yellowish-green. Females darker than males. Crown and hemelytra with fine brownish-green punctuation. Veins colored light yellow, indistinctly granulated.

Crown (Figs. 25-26) tetrahedral in cross section, apex slightly flattened; vertex 4-5 X as long as median length of pronotum (male and female respectively). Hemelytra transparent with slightly sharp apex enclosing entire abdomen.

Male genitalia as in Figs. 28-33. Aedeagus with a pair of narrow basal processes.

Female genitalia as in Fig. 27.

**Material Studied:** TURKEY: Southwest Anatolia, Antalya, Düzlerçami, 280 m, 22 July 2001 2♂ 2♀, on Graminae, Middle Anatolia, Ankara, Sincan Mülk. Ayas Mts. E. 1000 m, 20.07.2000 1♀, on Graminae, Sincan Mülk. Ayas Mts. E. 1000 m, 17.06.2000 1♀, on Graminae, Kızılıcahamam, Söğüksu, 1300 m, 07.06.1997 4♀, on Graminae, Söğüksu, 1300 m, 20.07.1997 2♂, on Graminae.

**Distribution in Turkey:** Middle Anatolia: Ankara and Southeast Anatolia: Diyarbakır (Dlabola, 1957; Lodos & Kalkandlen, 1982).

**Remarks:** Differing from the similar *Paradorydium lanceolatum* Burmeister in the flattened apex of the crown and aedeagus with narrow rather than triangular basal processes (D’Urso, 1992).

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