

Two new species of Pentatomidae from Turkey (Heteroptera)

N. Lodos *

F. Önder *

Summary

During our faunistic studies in Turkey two new species of Pentatomidae have been found. Of these, *Risibia verbasci* n.sp. has been collected on *Verbascum* sp., in Konya (Doğanhisar - Deştigin) and *Holcostethus hoberlandti* n.sp. on weeds in Gümüşhane (Kop Mountain). Holotypes and paratypes of both species are deposited at the University of Ege, Faculty of Agriculture, Department of Entomology and Agricultural Zoology, İzmir, Turkey and 1 ♂ paratypes, 1 ♀ of each species are also deposited at the National Museum (N. H.), Praha, Czechoslovakia.

Introduction

This is the fifth paper of the series of our studies on the Turkish Pentatomoidea. In the previous four papers (Lodos and Önder, 1973 a, b; 1979; 1980, the last one is in the press) we are treated rather large groups. However, in the present paper we dealt only two new species. These new species namely, *Risibia verbasci* Lodos - Önder and *Holcostethus hoberlandti* Lodos - Önder are described and illustrated on the basis of external features as well as the male genitaliae.

The writers are much indebted to Dr. L. Hoberlandt, Keeper of Department of Entomology, National Museum (N.H.) Praha and Dr. T. Vasarhelyi of Zoology Department, Hungarian National History Museum, Budapest for kindly loaning type-specimens to study, which helped to distinguishing these species from the closely related species.

Risibia Horvath

Horvath, 1888. *Rev. Ent.*, 7 : 168. Type-species *Risibia xanthochila* Horv, 1888, *Ibid.*, 7 : 169

* E.Ü. Ziraat Fakültesi, Entomoloji ve Zirai Zooloji Kürsüsü, Bornova, İzmir, Turkey.
Alınış (Received) : 28. 1. 1980.

Risibia verbasci n.sp (Figs. 1, 2)

General shape : Elongate oval, somewhat distended, closely punctate.

Colour : Dark brown. Head dark brown with a longitudinal light yellow line on the middle; somewhat thick yellow stripe on the sides of pronotum and one third basal side of corium; outer margin of yellow stripe of pronotum bordered with very thin black line; tip of scutellum yellow, connexivum black with yellow margin; membrane dark brown; antennae generally black, 1st antennal segment yellow dorsally and black ventrally, the tips of 2nd and 3rd, and base of 4th antennal segment yellowish; ventral surface of the body dirty yellow; opening of scent gland black; abdomen covered by brownish and blackish punctures on the middle and lateral areas, respectively; spiracles black; posterior angle of each abdominal segment with a black spot; 1st and 2nd rostral segments dirty yellow, 3rd and 4th segments black partially yellow; coxae and basal parts of femorae dirty yellow, apical parts of femorae, tibiae and tarsi black.

Measurements (mm) ♂ (♀) : Total body length, 9.13(9.24); head : length, 2.13(2.10), width, 2.38(2.29); width of vertex between eyes, 1.57(1.57); diameter of an eye, 0.36(0.36); length of antennal segments 1st, 2nd, 3rd, 4th and 5th, respectively, 0.45(0.45), 0.67(0.76), 0.85(0.81), 1.12(1.08), 1.48(1.17); pronotum: length, 2.34(2.27), width, 2.48(2.48) and 5.04(5.04) at the base and apex respectively; scutellum: length 3.62(3.55), width, 3.41(3.41) and 1.77(1.92) at the base and in the middle, respectively; length of rostral segments 1st, 2nd, 3rd and 4th, respectively, 1.17(1.21), 1.35(1.39), 0.67(0.72), 0.67(0.72).

Structure : Whole body deeply punctate except yellow stripe on the sides of pronotum and basal side of corium. Tylus much shorter than juga (fig. 2a); lateral margins of head somewhat sinuate in front of eyes; ratio of width of vertex to width of eye, 4.3. Relative lengths of the respective antennal segments in ♂ and (♀): 1.0(1.0), 1.4(1.7), 1.8(1.7), 2.4(2.6), 3.2(3.0). Rostrum reaching about the middle of hind coxae. Pubescence on the legs and the ventral surface of body yellow. Depth of punctures on abdomen reducing towards from lateral sides to the middle. Pygophore, paramere and genital segment of female as shown fig. 2b, c and d, respectively.

Material examined : Holotype ♂ , TURKEY: Konya (Doğanhisar-Deştigin, 23.4.1979 (Coll. F. Önder and Y. Karsavuran), on *Verbascum* sp, deposited at the University of Ege, Faculty of Agriculture, Department of Entomology and Agricultural Zoology, İzmir, Turkey.

Allotype (♀) and paratypes 6 ♂♂ and 1 ♀ same data as holotype and deposited at the same institution; 1 ♂ and 1 ♀ paratypes also deposited at National Museum (Natural History), Praha, Czechoslovakia.

R. verbasci n.sp. is very close to *R. christophi* (Jak.) from which it can be easily distinguished by the following characteristics:

Characteristics	<i>R. verbasci</i>	<i>R. christophi</i>
1) Length of body	9.13-9.24 mm.	9.94-10.0 mm.
2) Coloration		
— General colour	Dark brown	Light brown
— Outer margin of pronotum	Bordered with black line	Not so
3) Puncturation	Close, shallow	Wide apart, deep

Holcostethus Fieber

Fieber, 1861. Die europaischen Hemipteren, p. 333. Type-species, *Holcostethus sphacelatus* (F) 1794, *Ent. Syst.*, 4 : 120

Holcostethus hoberlandti n.sp. (Figs. 3, 4)

General shape : Almost oval in form, with prominent puncturation.

Colour : Dirty yellow with black puncturation. Tip of scutellum and connexivum light yellow, connexivum with a black patches on the anterior and posterior margins; membrane smoky. 1st antennal segment dirty yellow, 2nd dirty yellow, its tip pinkish, 3rd pink, towards to tip darkening, 4th and 5th red at the base and apex, with a broad black ring in the middle; ventral surface of the body dirty yellow with lighth puncturation; pro-, meso- and metathorax with black spot close to the coxae; each abdominal segment with a blackish spot at the anterior and posterior angles; legs dirty yellow, femorae and tibiae with brown spots.

Measurements (mm) ♂ (♀) : Total body length, 7.37(8.30); head: length, 1.62(1.75), width, 1.89(2.02); width of vertex between eyes, 1.39(1.48) diameter of an eye, 0.24(0.27); length of antennal segments 1st, 2nd, 3rd, 4th and 5th, respectively, 0.40(0.45), 0.58(0.72), 0.54(0.54), 0.72(0.85) and 0.94(1.03); pronotum: length, 1.57(1.75), maximum width, 4.09(4.68); scutellum: length, 2.70(3.01), width, 2.70(3.01) and 1.26(1.39) at the base and in the middle, respectively; length of rostral segments, 1st, 2nd, 3rd, and 4th, respectively, 0.90(1.03), 1.17(1.17), 0.58(0.58) and 0.63(0.58).

Structure : Clypeus anteriorly covered by genal plates; lateral sides of head slightly sinuated in front of eyes; ratio of width of vertex to width of

and 5.4 in ♂ eye 5.8 in ♀ ; head, anterior part of pronotum, scutellum and posterior area of corium shallowly punctated; relative lengths of the respective antennal segments in (♂) and (♀) : 1.0(1.0), 1.4(1.6), 1.3(1.2), 1.8(1.8), 2.3(2.3). Ventral surface of thorax with deep puncturation, abdominal sterna smooth; legs covered by yellowish hairs; rostrum reaching between hind coxae. Pygophore, paramere and genital segment of female as shown fig. 4a, b and c, respectively.

Material examined : Holotype ♂ , TURKEY: Gümüşhane (Kop Mountain), 9.7.1978, 2250m. (coll. F. Önder), on weeds, deposited at the University of Ege, Faculty of Agriculture, Department of Entomology and Agricultural Zoology, İzmir, Turkey.

Allotype (♀) and paratypes 2 ♂♂ , 3 ♀♀ same data as holotype and deposited in the same institution; 1 ♂ and 1 ♀ paratypes also deposited at National Museum (Natural History), Praha, Czechoslovakia.

H. hoberlandti n.sp. is very close to *H. inclusus* Dohrn. from which it can be easily distinguished by the absence of dark spots on the lateral margins of pronotum and also by the shapes of pygophore and paramere which shown in fig. 4.

It is pleasure to name this species after Dr. L. Hoberlandt who is a wellknown heteropterist in Europe as well as in the world.

Özet

Türkiye'den iki yeni Pentatomidae (Heteroptera) türü

Türkiye'nin değişik yörelerinde yaptığımız faunistik çalışmalar sırasında Pentatomidae familyasına bağlı 2 yeni tür bulunmuştur. Bunlardan *Risibia verbasci* n.sp., Konya (Doğanhisar-Deştiğin)'de *Verbascum* sp. üzerinde; diğer yeni tür, *Holcostethus hoberlandti* n.sp. ise Gümüşhane (Kop Dağı)'de değişik yabancı otlar üzerinde bulunmuş olup bunların holotype ve paratype'leri E.Ü. Ziraat Fakültesi Entomoloji ve Ziraat Zooloji Kürsüsü, İzmir'de ve her iki türe ait 1 ♂ ve 1 ♀ paratype'ler de National Museum (Natural History), Prag, Çekoslovakya'da muhafaza edilmektedir.

References

- Lodos, N. and F. Önder, 1978 a. Contribution to the study of Turkish Pentatomoidea (Heteroptera). I. Tarisa A.S. Türk. Bit. Kor. Derg., 2 (1): 15-29.
- ve ———, 1978 b. Türkiye Pentatomoidea (Heteroptera) üst familyası üzerinde arařtırmalar. II. Familya: Plataspidae Dall. Ibid., 2 (4): 195-209.
- and ———, 1979. Contribution to the study on the Turkish Pentatomoidea (Heteroptera). IV. Family: Acanthosomatidae Stal 1864. Ibid., 3 (3) : 139-160.
- ve ———, 1980. Türkiye Pentatomoidea (Heteroptera) üst familyası üzerinde arařtırmalar. III. Familya: Cydnidae Billberg. E. Ü. Ziraat Fakültesi Yay. No. 381 (In press).
- Pushkov, V. G., 1965. Pentatomoidea of Middle- Asia. (Heteroptera). Akademy Nauk. Kirgizkoi CCP, Institut Biologi, 329 pp.
- Seidentücker, G., 1975. Über anatolische Schildwanzen (Heteroptera, Pentatomidae). Reichenbachia, 15 (30) : 259-268.
- Stichel, W., 1961. Illustrierte Bestimmungstabellen der Wanzen. II. Europa. 4 (18) : 545 - 576; 4 (24) : 737 - 768, Berlin.

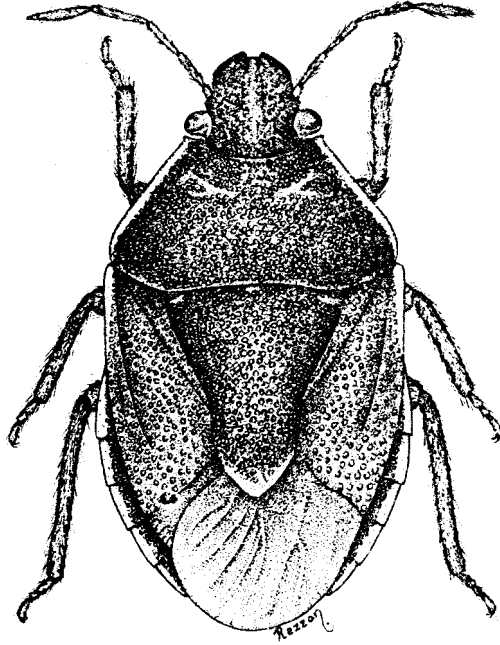


Fig. 1. *Risibia verbasci* n.sp. (Holotype) ().

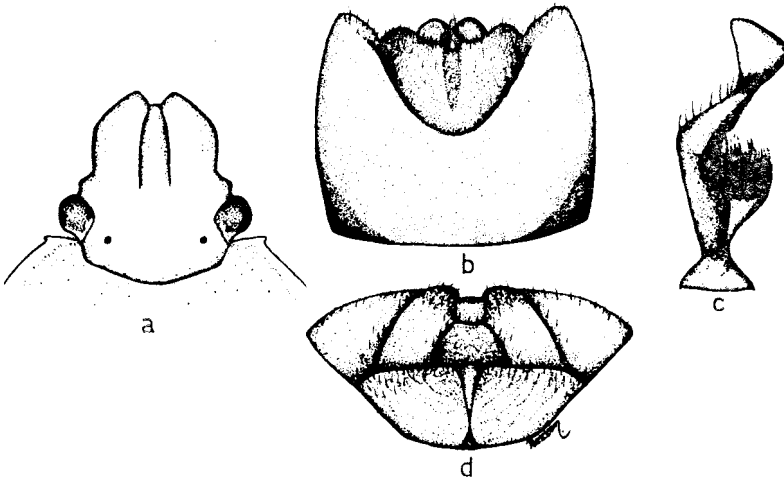


Fig. 2. *Risibia verbasci* n.sp. a, head; b, pygophore; c, paramere, d, genital segment of female.

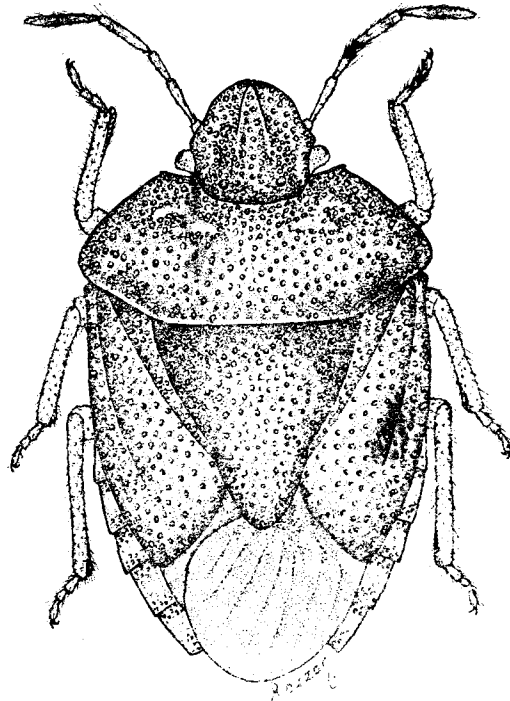


Fig. 3. *Holcostethus hoberlandti* n.sp. (Holotype) (♂).

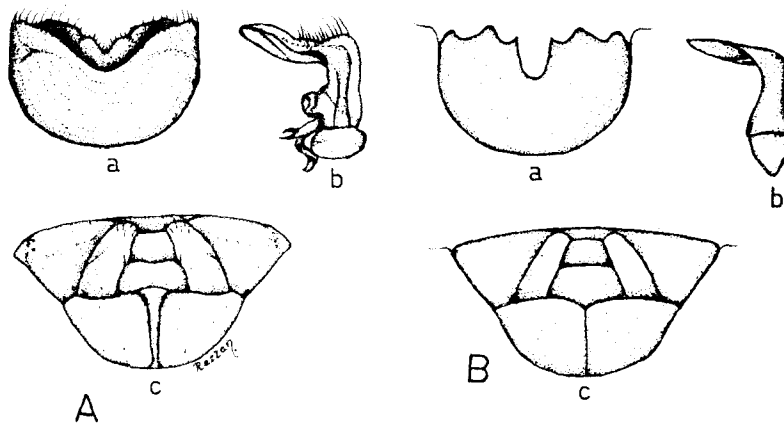


Fig. 4. Pygophore (a), paramere (b) and genital segment (c) of *H. hoberlandti* n.sp. (A) and *H. inclusus* Dohrn. (B) (Fig. 4 B after Pushkov, 1965).