

## *First Record of the Narrow Stink Bug *Mecidea lindbergi* Wagner, 1954 (Hemiptera: Heteroptera: Pentatomidae: Mecideini) from Turkey*

İnanç Özgen<sup>1\*</sup>, Barış Çerçi<sup>2</sup>

1 - Fırat University, Engineering Faculty, Bioengineering Department, Elazığ, TURKEY

2 - Köknar 4, Tarçın Sokak, Koru Mahallesi Ardıçlı Evler, Esenyurt, İstanbul, TURKEY

\*Corresponding author: inancozgen@gmail.com

**Abstract.** In this study, genus *Mecidea* is recorded from Turkey for the first time with the species *Mecidea lindbergi* Wagner, 1954. The newly recorded species is compared with the similar species of the genus *Mecidea* distributed in the Middle East.

**Key words:** Heteroptera, Pentatomidae, *Mecidea lindbergi*, new record, Turkey.

### Introduction

Most Pentatomidae species are known to be phytophagous however, some Asopinae species are predatory, feeding on other insects. Nearly 760 genera and 4100 species of Pentatomidae are known worldwide (YAZICI *et al.*, 2014). Some faunistic studies on this family in Turkey have been done by AHMAD & ÖNDER (1990); AKTAÇ & FENT (1999); AWAD & PEHLIVAN (2001); BEYAZ & TEZCAN (2002); BOLU *et al.* (2006); GHAHARI *et al.* (2014); KIYAK *et al.* (2004); KMENT & JINDRA (2005); KÜLEKÇİ *et al.* (2009); LODOS *et al.* (1978, 1987, 1998); LODOS & ONDER (1983); ÖZGEN *et al.* 2005a; b; TEZCAN & ONDER (1999); KULEKCI *et al.* (2009); FENT & AKTAÇ (2009); FENT (2010); FENT *et al.* (2010), DURSUN & FENT (2011), YAZICI *et al.* (2014) and DURSUN & FENT (2015). The genus *Mecidea* (Hemiptera: Pentatomidae) comprises a group of stink bugs with remarkably slender body shape. they occurs in the subtropical and adjacent

temperate parts of the world (SAILER, 1952). Until present, genus *Mecidea* was not represented by any species in Turkey.

### Material and Methods

The material was collected in the Siirt province of Turkey. The specimen was captured using a sweeping net during the morning period. The material is deposited at the Bioengineering Department laboratory of Fırat University, Turkey.

### Results and Discussion

*Mecidea lindbergi* Wagner, 1954

*Material examined:* Siirt, Merkez, 08.09.2009, 1 female, Özgen leg., B. Çerçi det.

Genus *Mecidea* is represented by 5 species in the Palearctic region (RIDER, 2006). Only *M. lindbergi* Wagner, 1954 and *M. pallidissima* Jensen-Haarup, 1922 are known from the Middle East. The species belonging to genus *Mecidea* are similar and mostly have

sexual dimorphism. *Mecidea lindbergi* is distinguished from *M. pallidissima* by the following characters: size between 11-12 mm (in *M. pallidissima* 8-11 mm); second antennal segment only slightly expanded (in *M. pallidissima* second antennal segment significantly expanded); second antennal segment of male 1.6-1.7 times as long as the third antennal segment (in *M. pallidissima* second antennal segment of male 0.6 times as long as the third antennal segment); body 3.6-3.8 times as long as the width of the posterior margin of the pronotum (in *M. pallidissima* body 4.1-4.2 times as long as the width of the posterior margin of the pronotum) (SAILER, 1952; HEISS, 1997). *M. pallidissima* is known from Canary Islands,

Egypt and Libya in North Africa; India, Iraq, Israel, Kuwait, Saudi Arabia and Yemen in Asia (RIDER, 2006). *M. lindbergi* is known from England, France, Greece, Italy, Spain (including Canary Islands), Portugal and Romania in Europe; Algeria, Egypt, Morocco and Tunisia from North Africa; Afghanistan, India, Iraq, Israel, Jordan, Saudi Arabia, Syria, Turkmenistan and Yemen in Asia (RIDER, 2006; TRISTAN, 2016; ROCA-CUSACHS & GOULA, 2017). *Mecidea lindbergi* is recorded from Turkey for the first time in this work.

*Host Plant:* *M. lindbergi* is known to feed on different species of Poaceae, including Marram Grass *Ammophila arenaria* (CARAPEZZA, 1997).



Fig. 1. Habitus of *Mecidea lindbergi* Wagner, 1954, female.

## References

AHMAD I., F. ÖNDER. 1990. A revision of the genus *Picromerus* Amyot and Serville (Heteroptera: Pentatomidae: Pentatominae: Asopini) from western Palearctic with description of the new species from Turkey. – *Turkish Journal of Entomology*, 14(2): 75-84.

AKTAÇ N., M. FENT. 1999. Edirne yöresi Pentatomidae (Heteroptera) faunası üzerine taksonomik ve faunistik araştırmalar. – *Turkish Journal of Zoology*, 23(Ek Sayı 2): 377- 395. (In Turkish).

AWAD T., E. PEHLIVAN. 2001. Systematic and faunistic study of the species of the tribe Carporini (Heteroptera:

- Pentatomidae: Pentatominae) in Turkey part I: Holcogaster Fb., Staria D. and Cnephosa Jak. – *Turkish Journal of Entomology*, 25(3): 163-174.
- BEYAZ G., S. TEZCAN. 2002. Kültür kekiği (*Origanum* spp.) (Lamiaceae)'ndeki Heteroptera takımına bağlı böcek faunasının belirlenmesi üzerinde çalışmalar. – *Turkish Journal of Entomology*, 26(1): 3-10. (In Turkish).
- BOLU H., ÖZGEN İ., M. FENT. 2006. Diyarbakır, Elazığ ve Mardin illeri badem ağaçlarında bulunan Pentatomidae (Heteroptera) türleri. – *Yüzyüncü Yıl Üniv. Zir. Fak. Tarım Bilimleri Dergisi*, 16(1): 25-28. (In Turkish).
- CARAPEZZA A. 1997. Heteroptera of Tunisia. - *Naturalista Siciliano*, 21 Suppl. A: 1-331.
- DURŞUN A., M. FENT. 2011. Notes on some little known species of Heteroptera from Turkey with new records for the fauna of Europe and the Turkish Thrace. - *North-Western Journal of Zoology*, 11(1): 92-96.
- FENT M., N. AKTAÇ. 2009. Trakya Bölgesi Acanthosomatidae, Thyreocoridae, Cydnidae, Plataspidae, Scutelleridae (Pentatomoidea: Heteroptera) faunasına katkıları. – *Turkish Journal of Entomology*, 33(3): 193-204. (In Turkish).
- FENT M. 2010. Contributions to Pentatomoidea (Heteroptera) fauna of Western Black Sea Region with a new record for Anatolian fauna: *Neottiglossa lineolata* (Mulsant & Rey, 1852). – *Journal of the Entomological Research Society*, 12 (1): 53-65.
- FENT M., A. DURŞUN, Y. KARSAVURAN. S. TEZCAN. O. DEMİRÖZER. 2010. A review of the tribe Halyini in Turkey (Hemiptera: Heteroptera: Pentatomidae) with two new records: *Apodiphus integriceps* and *Mustha vicina*. – *Journal of the Entomological Research Society*, 12(2): 1-13.
- GHAHARI H., P. MOULET, D. RIDER. 2014. An annotated catalog of the Iranian Pentatomoidea (Hemiptera: Heteroptera: Pentatomomorpha). - *Zootaxa*, 3837(1): 1-95. [DOI].
- HEISS E. 1997. Nachtrag zur Heteropteranfauna der Kanarischen Inseln V. - *Bericht des Naturwissenschaftlich-Medizinischen Vereins in Innsbruck*, 84: 359-369.
- ÖZGEN İ., C. GÖZÜAÇIK, Y. KARSAVURAN, M. FENT. 2005a. Güneydoğu Anadolu Bölgesi buğday alanlarında bulunan Pentatomidae (Heteroptera) familyasına ait türler üzerinde araştırmalar. – *Turkish Journal of Entomology*, 29(1): 61-68. (In Turkish).
- ÖZGEN İ., C. GÖZÜAÇIK, Y. KARSAVURAN, M. FENT. 2005b. Doğu ve Güneydoğu Anadolu bölgesinde antepfıstığı, kayısı, kiraz ve zeytin ağaçlarında bulunan Pentatomidae (Heteroptera) familyasına ait türlerin saptanması üzerinde çalışmalar. – *Ege Üniversitesi Ziraat Fakültesi Dergisi*, 42(2): 35-43. (In Turkish).
- KIYAK S., O. OZSARAC, A. SALUR. 2004. Additional notes on the Heteroptera fauna of Nevşehir province (Turkey). – *G. U. Journal of Science*, 17(1): 21-29.
- KMENT P., Z. JINDRA. 2005. New and interesting records of true bugs (Heteroptera) from Turkey, southeastern Europe, Near and Middle East. – *Acta Entomologica Musei Nationalis Pragae*, 45: 3-16.
- KÜLEKÇİ G., E. YILDIRIM, S. TEZCAN. 2009. Contribution to the knowledge of the Pentatomidae (Heteroptera) fauna of Turkey. – *Linzer biologische Beiträge*, 41(1): 697-708.
- LODOS N., F. ÖNDER. 1983. Contribution to the study on the Turkish Pentatomoidea (Heteroptera). VI. Asopinae (Amyot and Serville, 1843). – *Türkiye Bitki Koruma Dergisi*, 7 (4): 221-230.
- LODOS N., F. ÖNDER, E. PEHLIVAN, R. ATALAY. 1978. Ege ve Marmara Bölgesinin zararlı bölgeler faunasının tespiti üzerine çalışmalar. *Curculionidae, Scarabaeidae (Coleoptera); Pentatomidae, Lygaeidae, Miridae (Heteroptera)*. T.C. Gıda-Tarım ve Hayvancılık Bakanlığı Zirai Mücadele ve Zirai Karantina Genel Müdürlüğü, Ankara. 301 p. (In Turkish).
- LODOS N., F. ÖNDER, E. PEHLIVAN, R. ATALAY, E. ERKİN, Y. KARSAVURAN, S. TEZCAN. 1987. Akdeniz bölgesinin ziraatta zararlı ve faydalı böcek faunasının tespiti üzerinde araştırmalar

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- [Curculionidae, Scarabaeidae (Coleoptera), Plataspidae, Cydnidae, Acanthosomatidae, Scutelleridae, Pentatomidae, Lygaeidae, Miridae (Heteroptera)]. Ege Üniversitesi, Ziraat Fakültesi, Bitki Koruma Bölümü, Bornova, İzmir, 75 p. (In Turkish).
- LODOS N., F. ÖNDER, E. PEHLIVAN, R. ATALAY, E. ERKIN, Y. KARSAVURAN, S. TEZCAN, S. AKSOY. 1998. Faunistic studies on Pentatomoidea (Plataspidae, Acanthosomatidae, Cydnidae, Scutelleridae, Pentatomidae) of Western Black Sea, Central Anatolia and Mediterranean Regions of Turkey. – *Department of Plant Protection Faculty of Agriculture University of Ege, Bornova, İzmir: 27-67.*
- ÖNDER F., A. ÜNAL, E. ÜNAL. 1981. Heteroptera fauna collected by light traps in some districts of Northwestern part of Anatolia. – *Türkiye Bitki Koruma Dergisi*, 5(3): 151.
- RIDER D.A. 2006. *Family Pentatomidae*. In *Catalogue of the Heteroptera of the Palaearctic Region. Volume 5. Pentatomomorpha II*. The Netherlands Entomological Society, Amsterdam, xiii + 550 p.
- ROCA-CUSACHS M., M. GOULA. 2017. Photosharing website photographs as a tool to refine distribution of Iberian and Canarian Pentatomoidea (Hemiptera: Heteroptera). - *Boletín de la SEA*, 60: 397-405.
- SAILER R.I. 1952. A Review of the Stink Bugs of the Genus *Mecidea*. - *Proceedings of the United States National Museum*, 102(3309): 471-505.
- TEZCAN S., F. ÖNDER. 1999. Heteropterous insects associated with cherry trees in Kemalpaşa district of Izmir, Turkey. – In: *Vith European Congress of Entomology, 23-29 August 1998, Ceske Budejovice, Czech Republic, Book of Abstracts 2: 650*. Ege Üniversitesi Ziraat Fakültesi Dergisi 36 (1-3): 119-124.
- TRISTAN B. 2016. Species new to Britain. - *Het News*, 23: 3.
- Yazici G., E. Yildirim, E. Yildirim. 2014. Contribution to the knowledge of the Pentatomidae and Plataspidae (Hemiptera, Heteroptera, Pentatomomorpha) fauna of Turkey. - *Linzer biol. Beitr.* 46/2: 1819-1842.

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