

## FIRST DETECTION OF *PHRYNETA LEPROSA* (FABRICIUS) IN TURKEY (COLEOPTERA: CERAMBYCIDAE)

Hüseyin Özdikmen\* and Şener Atak\*\*

\* Gazi University, Science Faculty, Department of Biology, 06500 Ankara, TURKEY. E-mail: ozdikmen@gazi.edu.tr

\*\* Kocaeli İl Gıda Tarım ve Hayvancılık Müdürlüğü, Kocaeli, TURKEY. E-mail: sener.atak@gthb.gov.tr

[Özdikmen, H. & Atak, Ş. 2017. First detection of *Phrynetia leprosa* (Fabricius) in Turkey (Coleoptera: Cerambycidae). *Munis Entomology & Zoology*, 12 (1): 38-40]

ABSTRACT: The paper presents a new invasive alien longhorned beetle species (Coleoptera: Cerambycidae: Lamiinae) for Turkey. Accordingly, *Phrynetia leprosa* is a new detection to Turkish fauna of invasive alien longhorned beetles.

KEY WORDS: Cerambycidae, Lamiinae, invasive alien species, new detection, Turkey

International trade is increasing rapidly with developing transportation routes. As a result of this, it became easier for many animal species to move from their natural habitats with the breakdown of the natural barriers between countries and continents (Lowe et al., 2000). Many species are introduced outside their natural geographic range due to the increasing rate of trade in the world. Some of them are able to establish in their new environment and to develop dense populations where they can outcompete native species or disrupt ecosystem functioning. Insects take an important place among these animals. Insect populations are controlled by several factors in their natural habitats, but they causes important problems as they move by living plants and wood materials to another area. They are so called invasive alien species in their new location. These species' common characteristics are fast growth and reproduction, high dispersal ability, tolerance of wide range of environmental conditions and ability to feed with various food types (Anonymous, 2011). Phytosanitary standards and regulations are the basis for preventative management to avoid unintentional international movement of such plant pests.

The increase in importing of the plants and wood material in the recent years has been causing the presence of these species in Turkey. In this research *Phrynetia leprosa* is given as new detection to Turkish fauna of invasive alien longhorned beetles.

### MATERIAL AND METHODS

Samples for this work were carried out in 2015 in Kocaeli province of Turkey. A map showing distribution pattern of the species in Turkey is added. The type information for each species is arranged according to Tavakilian (2015). For distributional data of the species, Löbl & Smetana (2010) and Danilevsky (2015) for Palaearctic are chiefly used in the text.

### RESULTS

**Subfamily Lamiinae Latreille, 1825**  
**Tribe Phrynetini J. Thomson, 1864**

**Genus *Phrynetia* Dejean, 1835**(type species *Lamia marmorea* Olivier, 1797)*Inesida* J. Thomson, 1860: 86 (type species *Lamia leprosa* Fabricius, 1775)***Phrynetia leprosa* (Fabricius, 1775)**

(Figs. 1, 2)

**Original combination:** *Lamia leprosa* Fabricius, 1775: 178.**Type information:** ex collection Drury [type locality “America”].**Synonym:** *Lamia brunicornis* Guérin-Méneville, 1844: 239 [Guinea].**Range: Europe introduced:** France, Malta and **Afrotropical region**.**Report from Turkey:** This species detected as 4 ♂♂ and 1 ♀ in early June 2015 on exporting Iroko timbers (Moraceae: *Milicia regia* (A. Chev.) C.C. Berg, 1982) from Cameroon and 1 ♂ in summer of 2016 on exporting Kosipo timbers (Moraceae: *Entandrophragma candollei* Harms, 1896) from Cameroon in Kocaeli province of North-Western Anatolia (Turkey).**Remarks:** This species is known as “Castilloa Borer” commonly. It is widely distributed in the Afrotropics where it attacks mostly Moraceae and Ulmaceae. It has been introduced to Malta and France in Europe until now. It is a new record from Turkey.

Mifsud & Dandria (2002) stated “*It is a known pest of Castilloa, of which entire plantations have often been destroyed; in Cameroon, this tree is now no longer planted (Aulmann, 1913). In Uganda, severe attacks were reported on Morus (Hargreaves, 1924). P. leprosa (Fabricius) is regarded as a major pest of Chlorophora in West Africa, where extensive damage owing to the relatively large galleries which extend deep into the heartwood of these trees was recorded (Duffy, 1957). The adult beetle is known to cause appreciable damage by gnawing the bark of young trees. Larval development of P. leprosa (Fabricius) is reported to occur on a number of different unrelated plant species namely Chlorophora excelsa, Funtimia elastica, Hevea, Manihot, Castilloa elastica, probably Ficus elastica, Antiaris africana, Antiaris toxicaria, Celtis africana, C. zenkeri, C. durandii, Bosqueia phoberos, Holoptelea grandis, Chaetacme aristata and Morus spp. (Duffy, 1957), Canarium schweinfurthii, Cynometra alexandrei, Entandrophragma angolense, Staudtia stipidata, Morus mesozygia, Beilschmiedia corbisieri, Celtis brieiyi, Celtis mildebrandii, Mammea africana, Milleltia drastica, Morinda lucida, Ompgalocarpum, Oxystigma oxyphyllum, Parinari holstii, Pleiocarpa micrantha, P. tubicina, Pterocarpus soyauxii, Ricinodendron africanum, Scorodophloeus zenkeri, Strombosiopsis tetranda, Synsepalum subcordatum, Tetrupleura relraptera, Alstonia spp. and Afzelia africana (Duffy, 1980)*”.

*P. leprosa* (Fabricius) was reported by Mifsud & Dandria (2002) and Vincent (2007) from Maltese Islands and France in *Morus nigra*, *Morus alba* and *Ficus carica*.

## RECOMMENDATIONS

The pest *P. leprosa* should urgently be placed in plant quarantine directive Ek-1 A as a quarantine pest due to transported by exporting logs. Moreover, this species detected on exporting logs from Africa according to the present work. So exporting logs from Africa either should fumigate in port of entry or infected logs should redelivery to exporter.

## LITERATURE CITED

- Anonymous.** 2011. Invasive species. [http://en.wikipedia.org/wiki/Invasive\\_species](http://en.wikipedia.org/wiki/Invasive_species) (Accessed 04.11.2011).
- Danilevsky, M. L.** 2015. Catalogue of Palaearctic Cerambycoidea. Available from: <http://www.cerambycidae.net/catalog.pdf> (accessed 08.03.2015).
- Lowe, S., Browne, M., Boudjelas, S. & De Poorter, M.** 2000. 100 of the World's worst invasive alien species a selection from the global invasive species database. Published by The Invasive Species Specialist Group (ISSG) a specialist group of the Species Survival Commission (SSC) of the World Conservation Union (IUCN), 12 pp. First published as special lift-out in Aliens 12, December 2000. Updated and reprinted version: November 2004.
- Löbl, I. & Smetana, A.** 2010. Catalogue of Palaearctic Coleoptera, Vol. 6. Chrysomeloidea. Stenstrup: Apollo Books 924 pp.
- Mifsud, D. & Dandria, D.** 2002. Introduction and establishment of *Phrynetta leprosa* (Fabricius) (Coleoptera, Cerambycidae) in Malta. The Central Mediterranean Naturalist, 3 (4): 207-210.
- Tavakilian, G.** 2015. Base de données Titan sur les Cerambycides ou Longicornes. Available from: <http://lis-02.snv.jussieu.fr/titan/> (Accessed 31.07.2015).
- Vincent, R.** 2007. Catalogue des Coléoptères du département de la Saône-et-Loire. Vol. I. Cerambycidae. Terre Vive, Supplément hors-série: 184 pp.



Figure 1. *Phrynetta leprosa* (Fabricius, 1775).



Figure 2. The distribution pattern of *Phrynetta leprosa* (Fabricius, 1775) in Turkey.