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Authors: Cebeci, H. Huseyin, Hellrigl, Klaus, and Whitehead, Paul F.

Source: Florida Entomologist, 94(3) : 404-406

Published By: Florida Entomological Society

URL: <https://doi.org/10.1653/024.094.0304>

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FIRST RECORD OF THE PIT-PROP BEETLE *HEXARTHURUM EXIGUUM* (COLEOPTERA: CURCULIONIDAE) IN TURKEY

H. HUSEYIN CEBECI¹, KLAUS HELLRIGL² AND PAUL F. WHITEHEAD³

¹Department of Forest Entomology and Protection, Istanbul University, Faculty of Forestry, 34473 Sariyer Istanbul, Turkey

²Wolkensteinstraße 83 I-39042 Brixen Südtirol, Italia

³Moor Leys, Little Comberton, Pershore, Worcestershire WR10 3EH, UK

ABSTRACT

The pit-prop beetle, *Hexarthrum exiguum* (Boheman), is reported for the first time from Turkey where a population was found colonizing skirting boards (baseboards) in Istanbul. The feeding of adults and larvae caused the skirting boards to disintegrate.

Key Words: Cossoninae; weevil pest; new to Turkey; wood boring insect

RESUMEN

Se informa de la presencia del gorgojo de la madera, *Hexarthrum exiguum* (Boheman) por la primera vez en Turquía, donde se encontró una población de esta especie colonizando zócalos en Estambul. La alimentación de los adultos y las larvas causó que los zócalos se desintegraran.

Hexarthrum exiguum (Boheman, 1838) is known as the pit-prop beetle in central Europe, where it damages wet wood, mostly in mines but also in houses (Hickin 1963). This species is distributed from central Europe to Caucasia occurring on wood products and hardwood trees including Norway maple (*Acer platanoides* L.), horse chestnut (*Aesculus hippocastanum* L.), sweet chestnut (*Castanea sativa* Mill.), nettle tree (*Celtis australis* L.), hawthorn

(*Crataegus monogyna* Jacq.), beech (*Fagus* spp.), *Prunus* spp., oak (*Quercus* spp.), lime (*Tilia* spp.) and elm (*Ulmus* spp.) (Reitter 1916; Hoffmann 1954; Folwaczny 1983; Heijerman 1993; Wanat 1999; Hellrigl 2006, Whitehead 2006).

There is no previous evidence of *Hexarthrum exiguum* occurring in Turkey (e.g., Schimitschek 1944); and we now add this species to the entomofauna of Turkey.



Fig. 1. Skirting board showing fresh wood dust with adult beetles.

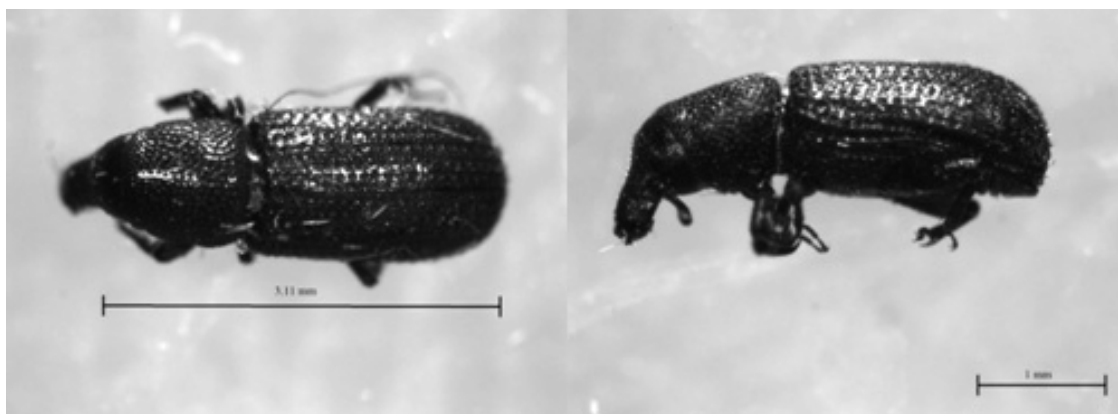


Fig. 2. Dorsal and lateral views of *Hexarthrum exiguum*.

MATERIALS AND METHODS

A survey was carried out to find the causes of disintegration of skirting boards (baseboards) constructed of Middle Density Fiberboard (MDF) in a house in the Kemberburgaz district of Istanbul Province 12 Jul 2010. In a basement, we observed small piles of fresh wood-dust around the skirting boards (Fig. 1). Adult beetles were collected from the infested areas and were placed in killing jars primed with ethyl acetate.

RESULTS AND DISCUSSION

Genus *Hexarthrum* Wollaston

Hexarthrum Wollaston, Ann. Mag. Nat. Hist., (3) 5, p. 448, 1860; Voss, Mitt. Münchn. Ent. Ges., 44/45, pp. 233 & 235, 1955.

All adult specimens were identified as a Cossoninae, *Hexarthrum exiguum* (Fig. 2). They are uniformly chestnut-brown in color and cylindrical, and have a typical broad-nosed appearance



Fig. 3. Effect of high air humidity in basement.

with a straight short rostrum and compact clubbed antennae. The rostrum is slightly longer than wide and is longer than the head. The scrobes reach the lower edge of the eyes and originate a little before the middle of the rostrum. The eyes are flat, legs and antennae reddish brown in color and antennae relatively short and glabrous. The funicle has six antennomeres, the first being equal in length to the second and third together but wider than all the others; the second to sixth antennomeres are clearly wider than long and very compact. The pronotum is tumid, longer than the rostrum and longer than wide, rounded at sides and covered in flat-bottomed pits (Fig. 2). These pits are contiguous at the lateral margins and the pleuron but not on the pronotal disc. The parallel elytral striae are composed of rows of regular more or less equidistant symmetrical pits. The interstriae, of similar width to the striae, are finely punctate and occasionally strigulate.

Infestations of this beetle are facilitated by high humidity (see Fig. 3). This observation is similar to that reported in the literature by Hoffmann (1954) and Hellrigl (2006). There are no detailed studies that evaluate the effects of *Hexarthrum* species and their potential relationships with fungi. It is therefore difficult to reach a conclusion about the likely economic consequences of damage caused by this genus. It is interesting to observe that *H. exiguum* is here not only synanthropic (see Whitehead 2006) but is also colonizing a synthetic reconsti-

tuted wood-based building material. Further attempts should be made to locate and identify *H. exiguum* elsewhere in Turkey.

REFERENCES CITED

- FOLWACZNY, B. 1983. 13. Unterfamilie: Cossoninae In H. Freude, K. W. Harde, and G. A. Lohse [eds.], Die Käfer Mitteleuropas Bd. 11. Goecke & Evers, Krefeld, pp. 30-43.
- HEIJERMAN, T. 1993. Checklist of the weevils occurring in the Netherlands and adjacent regions (Curculionoidea: Curculionidae, Apionidae, Attelabidae, Urodontidae, Anthribidae and Nemonychidae). Nederlandse Faunistische Mededelingen 5: 19-46.
- HELLRIGL, K. 2006. Über Auftreten von Holzinsekten in Häusern. Forest Observer 2(3): 333-348.
- HICKIN, N. E. 1963. The insect factor in wood decay. Hutchinson, London, 344 pp.
- Hoffmann, A. 1954. Fauna de France 59. Paris, pp. 487-1208.
- REITTER, E. 1916. Fauna Germanica. Die Käfer des Deutschen Reiches. V Band. K. G. Lutz-Verlag-Stuttgart, 343 pp.
- SCHIMITSCHEK, E. 1944. Forstinsekten der Türkei und ihre Umwelt. Volk und Reich Verlag Prag, 371 pp. (Familienreihe Rhynchophora: pp. 143-229).
- WANAT, M. 1999. Weevils (Coleoptera: Curculionoidea, Scolytidae and Platypodidae excluded) of the Białowieża Primeval Forest: Characteristics of the fauna. Parki Narodowe i Rezerwaty Przyrody 18(3): 25-47.
- WHITEHEAD, P. F. 2006. *Hexarthrum exiguum* (Boheman, 1838) (Col., Curculionidae) in urban Barcelona, Spain. Entomologists Monthly Magazine 42(1709): 241.