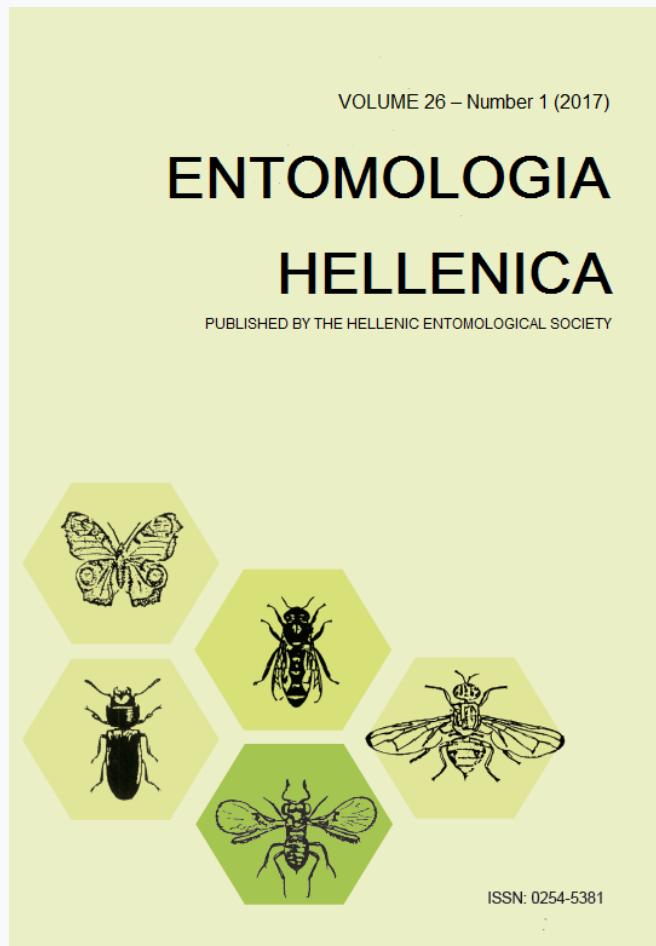


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First record of the wood-boring beetles *Oxymirus cursor* and *Sinodendron cylindricum* in Greece

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SHORT COMMUNICATION

First record of the wood-boring beetles *Oxymirus cursor* and *Sinodendron cylindricum* in Greece**ATHANASIOS G. MPAMNARAS AND PANAGIOTIS A. ELIOPoulos***

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ABSTRACT

Two wood-boring beetles are recorded for the first time in Greece. On late June 2001, the lepturine longicorn beetle *Oxymirus cursor* (L.) (Coleoptera: Cerambycidae) was found on Mt. Rodopi, and on early August 2012 the lucanid beetle *Sinodendron cylindricum* (L.) (Coleoptera: Lucanidae) was found on Mt. Falakron, in N. Greece. Images of both species and information on their distribution, ecology and biology, are presented.

KEY WORDS: Cerambycidae, *Fagus*, Lucanidae, *Pinus*, saproxylic.

Two wood-boring beetles are new records for insect fauna of Greece. Both species are polyphagous saproxylic beetles with larval development occurring in both coniferous and deciduous trees. They were found during collecting expeditions of the authors in N. Greece for entomological research, where a single specimen of each species was collected. Both specimens are deposited in the insect collection, Laboratory of Crop Protection, Technological Educational Institute of Thessaly, Larissa, Greece.

New Records from Greece**1. *Oxymirus cursor* (Linnaeus, 1758)**

Synonyms. *Cerambyx cursor* Linnaeus, 1758; *Cerambyx noctis* Gmelin, 1790; *Rhagium cursor* (Linnaeus) Fabricius, 1801; *Rhagium noctis* (Gmelin) Fabricius; *Stenocorus cursor* (Linnaeus) Olivier, 1795; *Stenocorus noctis* (Gmelin) Olivier, 1795; *Stenocorus striatus* Voet, 1806; *Toxotus*

cursor (Linnaeus) Mulsant, 1839; *Toxotus lacordairei* Pascoe, 1867.

Taxonomy. Belongs to the tribe Oxymirini Danilevsky, 1997 of the subfamily Lepturinae in the family Cerambycidae. The genus *Oxymirus* Mulsant, 1862 consists of only one species (*O. cursor*) worldwide. The distribution of the genus is European and W. Asiatic (Turgut et al. 2010). It should be noted that the genus included one more species (*Oxymirus mirabilis*), that was very recently separated to its own genus and is now treated as *Neoxymirus mirabilis* (Motschulsky, 1838), due to basic differences with *O. cursor* in imaginal characters (Danilevsky 2014).

Specimens examined. On late June 2001, on Mt. Rodopi, in the region of Vathyrema, at around 1300 m. a. s. l., north of the city of Drama in N. Greece, a single female of *O. cursor* was collected in pine forest (*Pinus* sp. L. (Pinopsida: Pinaceae)), while flying

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around rotting pine stumps. This specimen is the first record of the species for Greece (Fig. 1). Species identification was carried out by the first author, based on determination key of Bense (1995). The specimen was easily identified as *O. cursor* due to its reddish coloured lines on elytra (Fig. 1A) and lateral margins of pronotum armed with distinct blunt tubercles (Fig. 1B).

Morphology-Biology-Ecology. It has moderate-sized body (between 10-40 mm), generally ovoid, without metallic reflection. Antennae are filiform not extending beyond tip of abdomen. Pronotum shape variable, from subquadrate (about as long as wide) to transverse (distinctly wider than long); lateral margins of pronotum armed with distinct blunt tubercles.

This species is a polyphagous saproxyllic beetle, feeding mostly on plants of the genera *Abies*, *Alnus*, *Betula*, *Corylus*, *Fagus*, *Larix*, *Picea*, *Pinus* etc., but prefers coniferous trees. The larvae develop in rotting moist stumps (Svacha and Danilevsky 1988, Bense 1995, Sama 2002, Turgut et al. 2010, Chinery 2012). The active period of the adults lasts from May to July, and they are found on flowers on which they feed, or around rotting stumps (Chinery 2012).

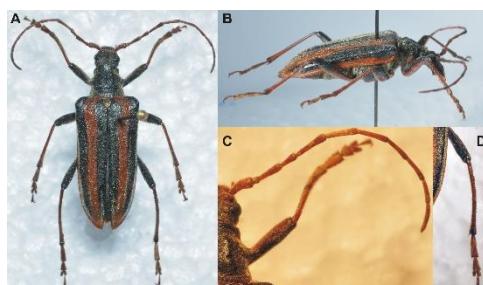


FIG.1. *Oxymirus cursor* (♀), A. dorsal view, B. lateral view, C. antenna, D. hind leg.

Previous records. Until now, *O. cursor* had not been found in Greece. It has been previously recorded from many European countries: Austria, Bosnia-Herzegovina, Belgium, Belorussia, Bulgaria, Croatia,

Czech Republic, Denmark, Estonia, European Russia, Finland, France, F.Y.R.O.M., Germany, Hungary, Italy, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine and also from W. Siberia and NE Turkey (Turgut et al. 2010).

2. *Sinodendron cylindricum* (Linnaeus, 1758)

Synonyms. *Lucanus tenebrioides* Scopoli, 1772; *Sinodendron americanum* Palisot de Beauvois, 1805; *Sinodendron juvenilis* Mulsant, 1842.

Taxonomy. The genus *Sinodendron* Hellwig, 1792, from the family Lucanidae, subfamily Sindesinae MacLeay, 1819 and tribe Sinodendrini Hellwig, 1794, is represented by four species in the world fauna. These are *S. cylindricum*, *S. persicum* (Reitter, 1902) known from Azerbaijan and Iran, *S. rugosum* (Mannerheim, 1843) from USA and Canada, and *S. yunnanense* Kral, 1994 from China (Fuente 1926, Baguena 1967, Espanol 1973, Espanol and Vinolas 1992, Ortuno 1993, Mizunuma and Nagai 1994, Lopez-Colon et al. 1996, Ballerio 2003).

Specimens examined. On early August 2012, on Mt. Falakron, on the road that leads to the snow center, at around 1400 m. a. s. l., north of the city of Drama in N. Greece, a single male specimen of *S. cylindricum* was collected in *Fagus* forest, in the hollow of an old beech. This is the first record of this species for Greece (Fig. 2). Species identification was carried out by the first author and was based on determination keys of Barraud (1993) and López-Colón (2000). Specifically, the specimen was easily determined as *S. cylindricum* due to its cylindrical body (Fig. 2A), jaws hidden by the clypeus (Fig. 2B), very narrow posternal extension wedged between the anterior coxae and ligule inserting at the end of the chin.

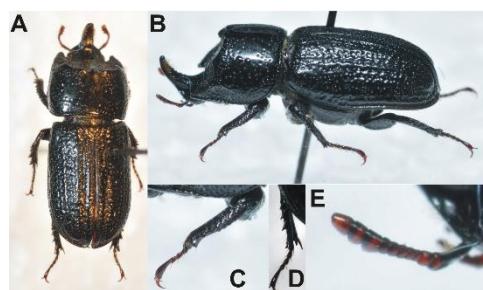


FIG. 2. *Sinodendron cylindricum* (♂), A. dorsal view, B. lateral view, C. front leg, D. hind leg, E. antenna.

Morphology-Biology-Ecology. Its body length is approx. 15 to 18mm. A pointed projection lies on the head of the males giving them a rhinoceros-like appearance ("Rhinoceros beetle"). The body is black, shiny with a blue-green sheen.

It is a polyphagous saproxylic species (larval development in rotting stumps of *Fagus*, *Quercus*, *Acer*, *Betula*, *Alnus*, *Carpinus*, *Aesculus*, *Malus*, *Fraxinus*, *Cerasus*, *Populus*, *Salix*, *Tilia*, *Picea*, *Pinus*), but prefers *Fagus* and is found mainly in beech forests (Baguena 1967, Espanol 1973, Espanol and Vinolas 1992, Ortuno 1993; Ballerio 2003, GTLI 2006, Chinery 2012). The active period of the adults lasts from May to August. They feed on oozing sap, and the males often use their cephalic horns to fight each other (GTI 2006, Chinery 2012).

Previous records. *Sinodendron cylindricum* has not been previously recorded in Greece. It is the only European representative of the genus *Sinodendron* with common presence in Europe (Norway, Sweden, Finland, Denmark, Ireland, Great Britain, Netherlands, Belgium, Luxembourg, France, Spain, Germany, Poland, Czech Republic, Slovakia, Switzerland, Austria, Hungary, Italy, Slovenia, Albania, Bulgaria, Ukraine) and also in Russia, Kazakhstan, Mongolia and China (Fuente 1926, Baguena 1967, Espanol 1973, Espanol and Vinolas 1992, Ortuno 1993, Mizunuma and Nagai 1994,

Lopez-Colon et al. 1996, Bunalski 2001, Ballerio 2003).

Conclusions – Remarks. Our study is a contribution to the knowledge of saproxylic beetles of Greece. These species are involved in or dependent on wood decay and therefore play an important role in decomposition processes and thus for recycling nutrients in natural ecosystems. The search for saproxylic insects will continue, given that Greece – and The Balkan Peninsula in general – not only emerges as a hotspot of saproxylic beetle biodiversity but also demonstrates the greatest concentrations of threatened saproxylic beetle species (Nieto and Alexander 2010).

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Πρώτη καταγραφή των ξυλοφάγων κολεοπτέρων *Oxymirus cursor* και *Sinodendron cylindricum* στην Ελλάδα

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ΠΕΡΙΛΗΨΗ

Δύο είδη ξυλοφάγων κολεοπτέρων καταγράφηκαν για πρώτη φορά στην Ελλάδα. Στα τέλη του Ιουνίου 2001, το είδος *Oxymirus cursor* (L.) (Coleoptera: Cerambycidae) της φυλής Oxymirini βρέθηκε στο όρος Ροδόπη, ενώ στις αρχές Αυγούστου 2012 το είδος *Sinodendron cylindricum* (L.) (Coleoptera: Lucanidae) της φυλής Sinidendrini βρέθηκε στο όρος Φαλακρό, στη Β. Ελλάδα. Παρουσιάζονται εικόνες των δύο ειδών καθώς και πληροφορίες σχετικά με την εξάπλωση τους, την βιολογία και οικολογία τους.