

SHORT COMMUNICATION

New record of *Hylesinus varius* (Coleoptera: Curculionidae: Scolytinae) on olive trees in Insular Greece

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Summary This is a new record of the ash bark beetle, *Hylesinus varius* (Olivier), traditionally known as a pest of *Fraxinus* (ash) and other Oleaceae species, on olive trees (*Olea europaea*) on Milos Island of the Cyclades Group, Greece, after an old report on Crete. Adult specimens were found in galleries of living branches during the olive fruit harvest. This new record emphasizes the need for intensified monitoring of the insect and further research to assess its dispersal and potential impact on olive production.

Additional keywords: Ash bark beetle, *Fraxinus*, galleries, *Hylesinus fraxini*, *Olea europaea*

Hylesinus varius (= *H. fraxini*) (Olivier 1800) (Coleoptera: Curculionidae: Scolytinae), commonly referred to as the ash bark beetle, is chiefly known for attacking members of the Oleaceae family, such as *Olea* and *Fraxinus* (Stark, 1952). Nonetheless, its host range also includes species in Betulaceae, Fabaceae, Fagaceae, Juglandaceae, Rosaceae, and Sapindaceae (Modarres Awal, 2012).

In October 2024, characteristic bark beetle galleries were discovered in living branches of several olive trees on Milos Island in the Southern Aegean Sea, Greece (36°44'03 N, 24°28'44 E). These galleries became evident when branches were inadvertently damaged during olive fruit harvesting (Fig. 1). Adult beetles retrieved from beneath the bark were transported to the Laboratory of Agricultural Zoology and Entomology at the Agricultural University of Athens (AUA) for identification. Twelve (12) specimens were collected and identified using standard morphological keys (Wood and Bright, 1992; Knížek, 2011), focusing on diagnostic traits such as body size, coloration, and gallery patterns. This process confirmed the presence of *H. varius*, repre-

senting the first documented occurrence of the species infesting olives in Greece (Fig. 2). Voucher specimens are preserved in the Laboratory of Agricultural Zoology and Entomology, AUA.

Hylesinus varius has been referred (as *Hylesinus fraxini* and *Leperesinus fraxini*) in Continental Greece (one specimen was recorded at Ouranoupolis, Central Macedonia with no reference to the host-plant), in Northern Aegean (one specimen was recorded at Mytilene with no reference to the host-plant), and in Crete (one specimen was recorded at Rethymnon, with reference to olive as a host-plant) (Peffer, 1995; Knížek, 2011).

Although often regarded as a secondary pest, *H. varius* can become more damaging under suitable conditions. In *Fraxinus*, its infestations may exacerbate crown dieback, particularly when compounded by fungal pathogens (Skovsgaard *et al.*, 2010). High population densities enable *H. varius* to colonize not only stressed or weakened hosts but also healthier, younger, and newly planted trees (Pfister, 2012). Such outbreaks have implications for forest management, as reported in Central Europe (Teusdea *et al.*, 2012), and the beetle's distribution may extend to novel hosts if environmental conditions prove favorable (Lieutier *et al.*, 2004).

Hylesinus varius is widely distributed throughout Europe with olive as a host-

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Figure 1. Olive trees infested by *Hylesinus varius*, Island of Milos, Greece, October 2024.

plant (Peffer, 1995; Knížek, 2011), extending into parts of Asia (as far as China) and North Africa (Modarres Awal, 2012; Knížek and Modlinger, 2013). Infestation of olive trees in Insular Greece, long after the first report from Crete, raises concerns over the pest's spread and potential impacts on both tree health and production in olive, holding 75% of fruit tree plantations in the country (Hellenic Statistical Authority, 2022). The beetle's propensity to infest weakened bark and young trees suggests that recently established orchards could be particularly vulnerable, while several infestations might threaten older, established groves.

Management strategies have involved sanitation measures, prompt removal of infested branches, and the utilization of natural enemies. Two hymenopteran parasitoids, *Cheiopachus quadrum* (Pteromalidae) and *Dendrosoter protuberans* (Braconidae) which attack the olive bark borer, *Phloeotribus scarabaeoides*, are known to parasitize the ash bark beetle, *H. varius*, (Campos and Lozano, 1994). This shared enemy complex may of-



Figure 2. Adult of *Hylesinus varius*, collected from galleries of infested branches of olive trees, Island of Milos, Greece, October 2024.

fer potential avenues for biocontrol or integrated pest management although further study is required.

In conclusion, documenting this new record of *H. varius* infesting olive trees in Insular Greece reinforces the importance of active pest surveillance in agricultural systems. Future research should prioritize understanding its distribution, population dynamics, and interplay with local biotic and abiotic conditions in the olive crop for pest risk assessment, safeguarding the sustainability and productivity of Greek olive orchards.

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ΣΥΝΤΟΜΗ ΑΝΑΚΟΙΝΩΣΗ

Νέα καταγραφή του εντόμου *Hylesinus varius* (Coleoptera: Curculionidae: Scolytinae) σε ελαιόδενδρα στη Νησιωτική Ελλάδα

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Περίληψη Η παρούσα ανακοίνωση αφορά σε νέα καταγραφή του σκολύτη του φράξου, *Hylesinus varius* (Olivier), επιβλαβούς εντόμου κυρίως για τον φράξο (*Fraxinus*) και άλλα είδη της οικογένειας Oleaceae, σε ελαιόδενδρα στη Νήσο Μήλο των Κυκλάδων μετά από παλαιά αναφορά για το έντομο στην Κρήτη. Ενήλικα άτομα βρέθηκαν εντός στοών σε κλάδους μετά από τη θραύση τους κατά την διάρκεια της ελαιοσυλλογής. Η νέα αυτή καταγραφή υπογραμμίζει την ανάγκη για εντατικοποίηση της παρακολούθησης και περαιτέρω έρευνα για να κατανοηθεί η διασπορά του εντόμου και δυνητική επίδρασή του στην ελαιοπαραγωγή.

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