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First record of the black twig borer *Xylosandrus compactus* (Eichhoff) (Coleoptera: Curculionidae, Scolytinae) from Europe

ANTONIO P. GARONNA[1], STEPHANIE A. DOLE[2], ANTONIO SARACINO[3], STEFANO MAZZOLENI[3] & GENNARO CRISTINZIO[3]

[1] *Dipartimento di Entomologia e Zoologia Agraria "Filippo Silvestri", Università degli Studi di Napoli "Federico II", Via Università, 100, 80055 Portici, Napoli, Italy. E-mail: garonna@unina.it*
[2] *California Academy of Sciences, 55 Music Concourse Dr., Golden Gate Park, San Francisco Ca 94118, USA.*
[3] *Dipartimento di Arboricoltura, Botanica e Patologia Vegetale, Università degli Studi di Napoli "Federico II", Via Università, 100, 80055 Portici, Napoli, Italy.*

During winter months and early spring 2011, we observed symptoms of scattered twig mortality in two historical woody urban parks of Campania (Southern Italy), at Portici (Parco Gussone: 40°48' N, 14°20' E) and Naples (Parco di Capodimonte: 40°52' N, 14°15' E). The woods consist of mature holm oaks (*Quercus ilex*) with an understorey of evergreen Mediterranean shrubs, natural regeneration of oak and several ornamental species. The examined dry terminals of holm oak, collected in late March 2011, hosted adult females of an ambrosia beetle of the genus *Xylosandrus* Reitter. Here, we report the first European record of the black twig borer (BTB) *Xylosandrus compactus (*Eichhoff) reproducing on new host plants in Italy. Insect and twig sampling was conducted irregularly during spring and summer 2011. Infested twigs of different host plants were isolated in plastic tubes, new emerged or callow adults counted and sexed and other biological data recorded. Hundreds of specimens of BTB, (>700 females and 43 males) emerged from sampled twigs or were directly collected from reproductive galleries at both localities.

The genus *Xylosandrus* (Reitter)

The genus *Xylosandrus* belongs to the Xyleborini, a large and complex tribe containing more than 1,200 species of the weevil subfamily Scolytinae (Coleoptera: Curculionidae), which is comprised of 26 tribes containing approximately 225 genera and 6000 species worldwide (Wood 2007). The genus has a widespread distribution primarily in tropical, but also in temperate regions of the world. In their catalogue of the Scolytinae, Bright & Skidmore (1997) listed 54 species of *Xylosandrus*. Phylogenetic analyses of the species formerly included in *Xylosandrus* carried out by Dole *et al.* (2010) and Dole & Cognato (2010), provided new species descriptions, as well as new generic and specific combinations, reducing the number of species ascribed to the genus to 39. In these main revisions, species that are morphologically consistent with the strict definition of the genus (*Xylosandrus* spp. are easily recognized by the widely separated procoxae), were included in the *Xylosandrus* "sensu stricto" clade. This clade included three economically important species: *X. compactus* (Eichhoff), *X. germanus* (Blandford) and *X. morigerus* (Blandford), the type species of the genus.

Several species from the tribe Xyleborini are important pests of ornamentals and forest species worldwide. In the few past decades, establishment of exotic species has steadily increased in Europe and the trend is expected to be further enhanced by global trade (Roques *et al*. 2009; Kirkendall & Faccoli 2010; Sauvard *et al.* 2010). As recently discovered, certain symbiotic fungi may be very pathogenic on novel hosts in non-native ranges with dramatic consequences at the landscape level (Fraedrich *et al*. 2008). Invasive fungus-associated woodborers increasingly emerge as a new and currently uncontrollable threat to forest and ornamental species in temperate regions (Hulcr & Dunn 2011). *Xylosandrus compactus* represents the third species of this genus established in Italy in recent years, after *X. germanus* (Zandigiacomo *et al*. 1998) and *X. crassiusculus* (Motschulsky) (Pennacchio *et al*. 2004); the fourth species in Europe, *X. morigerus*, regularly occurs in European greenhouses (Kirkendall & Faccoli 2010).

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