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## FIRST REPORT OF *GONIPTERUS SCUTELLATUS* COMPLEX (COLEOPTERA CURCULIONIDAE) IN SICILY (ITALY)

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Mazza G., Inghilesi A.F., Tricarico E., Montagna M., Longo S., Roversi P.F. – First report of *Gonipterus scutellatus* complex (Coleoptera Curculionidae) in Sicily (Italy).

During August 2015, the weevil *Gonipterus scutellatus* complex (Coleoptera Curculionidae), a pest of *Eucalyptus* spp., was found for the first time in Sicily. According to our surveys, *Eucalyptus globulus* was the only infested tree species.

KEY WORDS: *Eucalyptus globulus*, Eucalyptus snout beetle, invasive insect.

In August 2015, in Sicily, during entomological surveys, we found several damaged leaves of *Eucalyptus globulus* Labill. The signs of defoliation were distinctive of both adults and larvae of *Gonipterus scutellatus* complex (Coleoptera: Curculionidae); larvae eat only on leaves' surface, leaving characteristic tracks, while adults chew the leaf edges giving them a ragged, scalloped appearance (Fig. 1).

The two infested individuals of *E. globulus* are located exactly in Piedimonte Etneo (Catania) (37°48.818' N 15°9.874' E, 430 m a.s.l., and 37°48.146' N 15°11.079' E, 267 m a.s.l.). The damaged leaves, egg capsules and larvae were observed also on three *E. globulus* located in Nicolosi (Catania) (37°36.5358' N 15°01.0797' E, 700 m a.s.l.) from May to September 2015, but signs of defoliation had been visible since 2012.

Results from a web research showed that pictures of adults were also present in Forum Natura Mediterraneo (<http://www.naturamediterraneo.com>), reporting September 2009 as data of collection and Niscemi (Caltanissetta) as locality, but these findings have never been verified by experts.

The collective name *Gonipterus scutellatus* has often been used for the Eucalyptus snout beetle in the past, but it is known today that this name represents a species complex: there are indeed several cryptic species and its systematic is still under review (MAPONDERA *et al.*, 2012). The Eucalyptus snout beetle is an Australian native species that feeds on a wide range of host trees, belonging mainly to the genus *Eucalyptus* (reviewed in BOUWER *et al.*, 2014). This invasive beetle spread across other eucalypt-growing countries, including North and South America, New Zealand, China, South and East Africa and in Europe was found in Italy, France, Portugal and Spain (OEPP/EPPO, 2005). In Italy the species was firstly detected in Liguria and then in Latium (ARZONE and MEOTTO, 1978;

MALTZEFF and COLONELLI, 1994; ABBAZZI and MAGGINI, 2009). In 2012, the species was found in Montecristo Island, in the Tuscan Archipelago (MAZZA *et al.*, 2012) and further surveys confirmed the presence in several localities across Tuscany (INGHILESI *et al.*, 2013a, b). Until now, the damages were registered always on *E. globulus* leaves and only in two cases, the weevil was found on *E. bicostata* Maiden, Blakely & Simmons and on an undefined species (probably a hybrid between *E. camaldulensis* Dehnh. and *E. rudis* Endl.) (INGHILESI *et al.*, 2013a; NEWETE *et al.*, 2011). The *Eucalyptus camaldulensis* trees, notwithstanding the proximity with *E. globulus*, have been never damaged, confirming the host specificity of this beetle (reviewed in BOUWER *et al.*, 2014).

The eucalyptus plantations have a long history in Italy. In particular, in Sicily, 35,000 hectares of eucalyptus wood were implanted at the end of the last century (LA MANTIA, 2013). *Eucalyptus camaldulensis* is one of the most common species, in the continental Italy as in the whole world (FAO, 1979). Only few other species of *Eucalyptus* are present in Sicily and few represented, as in the case of *E. globulus*. *Eucalyptus globulus* has been reported as one of the most heavily damaged hosts for *Gonipterus* spp. (reviewed in BOUWER *et al.*, 2014), and so host availability is one of the main factors influencing the presence of this beetle. The low presence of this *Eucalyptus* species could justify the delay in the discovery of *Gonipterus scutellatus* complex in Sicily, besides the few studies on community of insects hosted by these trees (e.g. ROMANO and CARAPEZZA, 1975; LONGO *et al.*, 1993; BELLA and LO VERDE, 2002; MAZZEO and SISCARO, 2007). Further studies are necessary to assess the actual distribution in this region and the impacts on other *Eucalyptus* species, in particular on the recently introduced ornamental ones, such as *E. gunnii* Hook. f. At present, notwithstanding the *Gonipterus scutellatus* is reported as an EPPO A2 qua-



Fig. 1 – *Gonipterus scutellatus* complex: 1. Larva; 2. Typical leaf damage caused by larvae.

rantine pest of *Eucalyptus* spp. (OEPP/EPPO, 2005), this weevil does not seem to be a threat for the Sicilian eucalyptus trees.

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