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## BREVI NOTE / SHORT NOTE

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### *STRELITZIA NICOLAI* (Strelitziaceae), NEW HOST PLANT FOR *RHYNCHOPHORUS FERRUGINEUS* (Coleoptera Curculionidae) IN SICILY

*Strelitzia nicolai* (Strelitziaceae), nuova pianta ospite di *Rhynchophorus ferrugineus* (Coleoptera Curculionidae) in Sicilia

The Red Palm Weevil *Rhynchophorus ferrugineus* (Olivier, 1790) (Coleoptera Curculionidae), is considered the main palm pest in the Mediterranean basin. This species is native to Southeastern Asia and is now widely spread throughout Oceania, Africa, Europe and the Caribbean (MURPHY & BRISCOE, 1999; EPPO, 2008, 2012; CHEBBI *et al.*, 2011; RODA *et al.*, 2011). Moreover, in North America the pest was found in California, where it is now considered eradicated (CDFA, 2010; IPPC, 2015).

In Italy the first registered sightings were on nursery palms in Tuscany (SACCHETTI *et al.*, 2005, 2006) and on ornamental palms in urban areas in Sicily (LONGO & TAMBURINO, 2005; LO VERDE & MASSA, 2007). Afterwards, the pest colonized all the Italian Regions in which palms were present, including many small islets such as Lampedusa and Linosa (pers. obs).

The species was seen to be invasive and very difficult to control, due to its adaptability to develop on several palm species, to its concealed living habits and to its lack of natural enemies in the newly colonized regions. The Red Palm Weevil has been reported to attack more than 20 species of palms, which are listed in the 2010/467/EU Commission Decision regarding susceptible plants and the measures to be taken when the species is detected.

In Italy almost 40,000 palms had been infested and killed as of February 2010 (almost 20,000 in Sicily, LO VERDE *et al.*, 2011), mostly *Phoenix canariensis* H. Wildpret, 1882, a species native to the Canary Islands. This palm species is widely present in Sicily both in private gardens and public green areas (BAZAN *et al.*, 2005; BARBERA & ROMANO, 2009).

Moreover, in Sicily the Red Palm Weevil has been found in urban gardens on several other Arecaceae: *Phoenix dactylifera* L., *Washingtonia* spp., *Chamaerops humilis* L., *Syagrus romanzoffiana* (Cham.) Glassman, *Jubaea chilensis* (Molina) Baill., *Howea forsteriana* (F. Muell.) Becc., and *Livistona chinensis* (Jacq.) R. Br. ex Mart. (LONGO & COLAZZA, 2009), and most recently its presence was also recorded on *Chamaerops humilis* in natural conditions (GIOVINO *et al.*, 2012).

#### THE RED PALM WEEVIL INFESTATION ON *STRELITZIA NICOLAI* IN SICILY

The insect was sighted in the “Bioparco di Sicilia” (Carini, Palermo province), a large park (about 60,000 m<sup>2</sup>) containing a zoological garden and a series of exhibitions promoting the nature



Fig. 1 — Stem of *Strelitzia nicolai*, where the emerging hole of *Rhynchophorus ferrugineus* was noticed (Carini, Palermo 14.IX.2015)



Fig. 2 — Some plants of *Strelitzia nicolai* dead for the action of *Rhynchophorus ferrugineus* (Carini, Palermo 14.IX.2015)

conservation and environmental education. In the month of September 2015, some withering plants of *Strelitzia* sp. were observed and several larvae and cocoons closely resembling those of *R. ferrugineus* were collected at their base (Figs 1-2). Considering that the usual host family of the Red Palm Weevil is Arecaceae, and that the family Strelitziaceae Hutch. has not been reported in literature as host of this insect, specific identification of the adult weevils obtained from the cocoons was confirmed by examining the insects with a stereomicroscope and using the WATTANAPONGSIRI (1966) identification key.

The infested plants were also examined and identified by MS as *Strelitzia nicolai* Regel & K. Koch. (SPECIALE & DOMINA, in press).

The attack of *R. ferrugineus* on the genus *Strelitzia* has never been reported in the literature, although two sightings of infested *Strelitzia* sp. have been made in the provinces of Trapani (G. La Mantia, *pers. comm.*) and Siracusa (A. Linares, *pers. comm.*) in the past few years.

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