

# A new tree dwelling aphid, *Greenidea ficicola* Takahashi, 1921 for Malta (Hemiptera: Aphidoidea: Greenideidae)

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**ABSTRACT.** *Greenidea ficicola* is recorded for the first time from the Maltese Islands. Distributional, ecological and taxonomic notes are included for this species.

**KEY WORDS.** Hemiptera, Aphidoidea, *Greenidea ficicola*, *Ficus*, Malta.

## INTRODUCTION

Despite the economic importance of aphids, the aphidofauna of the Maltese Islands is poorly documented. Reference to aphids associated with trees in the Maltese Islands is to be found in two main publications: the work of CARUANA GATTO (1926) on plant galls entitled “*Primo contributo alla conoscenza dei Zooecidii delle Isole Maltesi*”, where reference to fourteen aphid species which cause plant galls on trees are included, and the work of SALIBA (1963) entitled “*Insect pests of Crop plants in the Maltese Islands*” where seven species of aphids are mentioned as occurring on economically important trees. BORG (1922) in his book entitled “*Cultivation and diseases of fruit trees in the Maltese Islands*” does mention aphids but it is often not clear whether these records are authentically Maltese.

The genus *Greenidea* Schouteden (Aphidoidea: Greenideinae: Greenideini) is represented by about 45 eastern Asiatic species extending from Japan to eastern Australia and from India to the Philippines. Species in this genus live mainly on the shoots and young foliage of trees, particularly Fagaceae but also Moraceae, Betulaceae, Junglandaceae and less commonly on members of more recently evolved families such as Myrtaceae and Theaceae (BLACKMAN & EASTOP, 1994, 2000; GHOSH, 1987).

## *Greenidea ficicola* Takahashi, 1921

**Material examined: MALTA:** Pieta (around gardens of St. Luke’s Hospital), 24.iv.2007; Attard, 8.v.2008 (along road in front of Secondary School); Ta’Xbiex, 9.v.2008 (along sea front road); Fgura, 14.v.2008; Marsa (Ghammieri), 17.v.2008; Valletta, 20.vi.2008. All material was collected from *Ficus microcarpa* L. by the author.

**Short description:** Apteræ pear-shaped (Fig. 1), yellowish-brown to green to dark brown. Body length 1.7-2.2 mm. Long, hairy siphunculi (at least one-third of body length) dark brown curved outwards distally. Dorsum of body covered by conspicuous setae. Alatae have an elongated body with dark-brown abdomen and longer siphunculi (about two-thirds of body length).

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**Figure 1** – *Greenidea ficicola* aptera.

**Distinguishing features:** *Greenidea ficicola* can be readily distinguished from all other aphids occurring in the Euro-Mediterranean area by the presence of setae on the siphunculi (this morphological character distinguishes all members of the Greenideini).

**Ecology:** This aphid feeds on *Ficus* spp., on the undersides of young leaves and on the shoots, but is sometimes concentrated on the fruits. In India the species is recorded from other plants belonging to other families, including *Psidium guajava* L. (BLACKMAN & EASTOP, 2000). In both Italy and Malta, the species was mainly found to infest ornamental *Ficus* which are widely used in tree planting programmes especially along road sides and roundabouts. In Malta, large infestations of the species were found on such trees mainly in early summer.

**Global distribution:** India, Pakistan, Bangladesh, Nepal, eastern Russia, China, Taiwan, Japan, Philippines, Indonesia, Malaysia and Australia (BLACKMAN & EASTOP, 2000). Recently, this aphid was also reported from the Afrotropical Region (Burundi) (REMAUDIÈRE *et al.*, 1992), from the Nearctic Region (Florida) (HALBERT, 2004), from the Neotropics (Brasil) (SOUSA-SILVA *et al.*, 2005) and from the West Palaearctic (Italy) (BARGAGALLO *et al.*, 2005).

**Comments:** *Greenidea ficicola* could have reached the Maltese Islands either through imports of ornamental *Ficus* spp. or via wind currents which facilitate transport of winged forms. BARGAGALLO *et al.* (2005) argued that this second hypothesis is more likely with respect to the recent findings of this species in Italy, this being mainly due to the recent occurrence of this aphid in new, distantly separated territories.

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