



A new species of *Acanthococcus* (Hemiptera, Coccoidea, Eriococcidae) on *Leptospermum scoparium* (Myrtaceae) from Italy and France

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Abstract

The adult female, 1st-instar nymph, 2nd-instar male and 2nd-instar female nymphs of a new species of felt scale, *Acanthococcus mariannae* Pellizzari, are described and illustrated. The new species was collected off *Leptospermum scoparium* (Myrtaceae) in Italy and France. An identification key of *Eriococcid* species known to occur on *Leptospermum* spp is also provided.

Key words: *Acanthococcus mariannae*, felt scales, Italy, France, identification key

Introduction

In August 2004, an Eriococcid was collected off potted *Leptospermum scoparium* (Fam. Myrtaceae) in Genova (Italy). The potted plants were heavily infested and one of them was covered with sooty mould and was dead (Plate 2, fig. c). Two years later the same eriococcid species was recorded off the same host plant in Corsica (France), in two localities (Ajaccio and Olmeto). Thus this Eriococcid would appear to be linked to *Leptospermum scoparium*.

The genus *Leptospermum* comprises more than 80 species of plants native to the Australasian region. Among them, *Leptospermum scoparium* is a shrub, native to New Zealand and southeast Australia. It is largely cultivated as an ornamental plant and several cultivars have become established in the trade. It is well known that myrtaceous plants are host to a large number of eriococcid species mainly in the Australasian Region and South America: according to Ben-Dov *et al.* (2010) there are 157 species in 28 genera. Seven species belonging to the genus *Eriococcus* have been recorded so far on *Leptospermum* sp., all from Australia. They are *E. campbelli* Hoy, *E. cultellus* Hoy, *E. gibbus* Hoy, *E. milleri* Hoy, *E. spiniger* Maskell, *E. leptospermi* Maskell and *E. orariensis* Hoy. The latter two species have also been introduced into New Zealand (Hoy, 1953; 1954; 1959) where they are considered pests of ornamental *Leptospermum*. Their accidental introduction into New Zealand caused the death of *Leptospermum* trees over large areas between the 1940s and 1960s (Epenhuijsen *et al.*, 2000). However, the species recently discovered on *Leptospermum* in Italy and France appears to be none of these species.

A comparison with the known *Eriococcus* and *Acanthococcus* species living on Myrtaceae (37 species, of which 4 are from Brazil, the others from Australasia) (Ben-Dov *et al.*, 2010) did not lead to any identification. Mounted specimens were sent to Dr. Douglass Miller (USDA) and he concluded that this apparently new eriococcid was not from the Australasian area (2004, personal communication). In addition, Rosa Henderson (Landcare Research, Auckland, New Zealand) was sent specimens and she also concluded that it was not a known Australian or New Zealand species (2006, personal communication). They both pointed out the presence of large dorsal and ventral macrotubular ducts, a morphological character not present in any Australasian eriococcids.