

The spittle bug *Philaenus tessellatus* Melichar, 1899 (Hemiptera, Auchenorrhyncha, Cercopidae) is a distinct species

S. DROSOPOULOS¹ & J.A. QUARTAU²

¹ Agricultural University of Athens, Dept. of Agricultural Biotechnology, Iera Odos 75, 118 55 Athens, Greece; e-mail: drosop@aia.gr

² Depto de Zoologia e Antropologia/Centro de Biologia Ambiental, Faculdade de Ciências de Lisboa, C2, Campo Grande, 1750 Lisboa, Portugal; e-mail: jquartau@fc.ul.pt

Abstract

Philaenus tessellatus Melichar, 1899, was described more than a century ago, originally from Tunisia, but later appeared to be a problematic species. In 1959, it was reduced to a geographic subspecies of the closely related *P. spumarius* (Linnaeus, 1758), with which in 1972 it was synonymized. However, *P. tessellatus* does possess constant species-level characters. We have found that: (i) both species occur in Portugal, where *P. tessellatus* is statistically significantly larger than *P. spumarius*; (ii) the best diagnostic characters are the appendages of the male aedeagus (larger in *P. tessellatus* than in *P. spumarius*); (iii) in Portugal, *P. spumarius* seems to occur in large numbers north of Lisbon, becoming rare in the south, while *P. tessellatus* occurs only south of Lisbon; and (iv) the six colour morphs appear to be identical in both species. We do not know if the two species hybridize where they occur sympatrically.

Key words: spittle bugs, *Philaenus tessellatus*, *P. spumarius*, taxonomy, morphology, ecology, polymorphism, Portugal

Introduction

The spittle bugs *Philaenus signatus* Melichar, 1896 and *P. tessellatus* Melichar, 1899 were described more than a century ago from Kerkyra-Greece and Tunisia, respectively. However, *P. tessellatus* appeared to some taxonomists a problematic species. Wagner (1959) reduced it to a geographic subspecies of the common closely related *P. spumarius* (Linnaeus, 1758) and later, in 1972, Nast reported it as a synonym of *P. spumarius* in his annotated check list of the Palearctic Auchenorrhyncha (Homoptera).