

STUDY OF THE VIRUS VECTOR GENUS *TRICHODORUS* (DIPHtherOPHORINA, TRICHODORIDAE) FROM THE IBERIAN PENINSULA, AN APPARENT CENTRE OF SPECIATION

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Trichodoridae are polyphagous root ectoparasites occurring worldwide. Their major pest status is as virus vector of Tobraviruses. Currently, the family has 102 species classified within 6 genera. The genus *Trichodorus* is the largest in number of species (56) and predominantly occurs in temperate regions. Traditional morphology-based taxonomy revealed for Europe, a very high species diversity within the Iberian Peninsula, comprising about one fifth of all Trichodoridae described. Characteristic for this fauna is the presence of a morpho-species group within *Trichodorus*, characterized in males by slightly ventrally curved spicules with a mid-blade constriction with bristles and females with relatively large vaginal sclerotized pieces, quadrangular to triangular in shape. Recent surveys for Trichodoridae in cultivated and natural environments in Southern Spain and compared with the fauna from Portugal revealed four new species of *Trichodorus*, three of them belonging to this morpho-species group. Molecular analyses based on nuclear ribosomal RNA genes (D2-D3 expansion segments of 28S and partial 18S gene) supported not only the new species but also the morpho-species group as a separate clade. The integrated approach of morphology based taxonomy with molecular and biogeographic data enhanced the accuracy of the observed biodiversity and strengthen the hypothesis of the Iberian Peninsula as a center of speciation.