



Notes on the genus *Eotetranychus* (Acari: Tetranychidae) in Italy and France with a redescription of *Eotetranychus fraxini* Reck, new record for Italy and Western Europe

ALAIN MIGEON¹, VALERIA MALAGNINI², MARIA NAVAJAS¹ & CARLO DUSO³

¹Institut National de la Recherche Agronomique, Centre de Biologie et Gestion des Populations, Campus International de Baillarguet, CS 30016, 34988 MONTFERRIER sur LEZ Cedex, France. E-mail: migeon@supagro.inra.fr; navajas@supagro.inra.fr

²Istituto Agrario San Michele all'Adige, Via Edmondo Mach, 1 38010 S.Michele all'Adige (TN), Italy.

E-mail: valeria.malagnini@iasma.it

³Department of Environmental Agronomy and Crop Science – University of Padua, Viale dell'Università, 16, 35020 Legnaro (PD), Italy. E-mail: carlo.duso@unipd.it

Abstract

Until now eight species in the genus *Eotetranychus* were known from Italy and nine from France. This study reports the presence of two additional species in Italy: *E. aceri* Reck and *E. fraxini* Reck and one in France: *E. uncatus* Garman. New host plants are reported for *E. rubiphilus* Reck and *E. aceri*, and distributional and host plant data are recorded for several other species. *E. fraxini* was previously known only from Georgia and Hungary and is redescribed here.

Key words: Acari, Tetranychidae, host plants, Vitis vinifera, geographic distribution, Europe

Introduction

The family Tetranychidae is the best studied among the phytophagous Acari; however the related literature refers mainly to only a few species of economic importance. They remain poorly known in terms of biogeography and description of biological features, particularly concerning host plant ranges. Moreover, the identity of several species included in the family remains uncertain, many species being in need of redescription and many synonymies still remaining unresolved. In Western Europe new species are still being detected (Auger *et al.*, 2003), and new species records have recently been reported for several countries (Navajas *et al.*, 1996; Ferragut & Escudero, 1999; Bolland & Vala, 2000; Migeon, 2003; Migeon, 2005).

Among the Tetranychidae, members of the genus *Eotetranychus* have been widely studied (Jeppson *et al.*, 1975). According to the literature the Italian fauna includes ten species of the genus (Bernini *et al.*, 1995; Castagnoli & Nannelli, 2003); however only eight of these are actually present in this country (Bolland *et al.*, 1998). The species *E. gibbosus* (Canestrini) has been moved to the genus *Platytetranychus* (Bolland *et al.*, 1998) and *E. pomi* Sepasgosarian is considered a synonym of *E. pruni* (Oudemans) (Wainstein, 1960). Both Bolland *et al.* (1998) and Auger *et al.* (2003) reported nine species of *Eotetranychus* in France.

Eotetranychus carpini (Oudemans) is a serious pest in European vineyards (Delmas & Rambier, 1954; Ambrosi & Lenarduzzi, 1959; Mathys & Tencalla, 1959; Schruft, 1985). It has been observed throughout the Italian peninsula, Sicily (Bernini *et al.*, 1995), and France (Delmas & Rambier, 1954; Vila, 1985). While this species exploits a wide range of host plants (Rota, 1962; Laffi & Ponti, 1997; Bolland *et al.*, 1998) it appears to have a particular preference for hornbeam (*Carpinus betulus* - Betulaceae). Dosse (in Gasser & Mathys, 1960) suggested the existence of two distinct forms of *E. carpini* in Europe, one occurring on *Vitis vinifera*