

First record of *Myzus persicae* (Sulzer, 1776) in *Eucalyptus urophylla* S. T. Blake

Primeiro registro de *Myzus persicae* (Sulzer, 1776) em *Eucalyptus urophylla* S. T. Blake

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ABSTRACT: Insect pests are limiting factors to the expansion of *Eucalyptus* spp. plantations in Brazil. Aphids of the species *Myzus persicae* (Sulzer, 1776) (Hemiptera: Aphididae) are a key pests in different crops and may negatively affect the growth, development and survival of plants. This paper reports the first record of *M. persicae* in seedlings of *Eucalyptus urophylla* grown in a greenhouse in Diamantina, Minas Gerais state, Brazil. This finding suggests the implementation of an integrated management program for this aphid, in order to prevent it from becoming a pest in *Eucalyptus*.

KEYWORDS: Insecta; seedlings; aphids.

RESUMO: Insetos considerados pragas são fatores limitantes à expansão da eucaliptocultura no Brasil. Os pulgões da espécie *Myzus persicae* (Sulzer, 1776) (Hemiptera: Aphididae) podem ser pragas-chave em diversas culturas, pois afetam negativamente o crescimento, o desenvolvimento e a sobrevivência das plantas. Este trabalho relata o primeiro registro de ocorrência de *M. persicae* em mudas de *Eucalyptus urophylla* conduzidas em casa de vegetação no município de Diamantina, MG, Brasil. Essa constatação sugere a implantação de um programa de manejo integrado para tal afídeo, a fim de evitar que ele se torne praga para a cultura do eucalipto.

PALAVRAS-CHAVE: Insecta; mudas; afídeos.

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Received on: 05/26/2015. Accepted on: 10/05/2016

Reforestation in the past decades contributed to the migration of phytophagous insects to monocultures of exotic species and may become one of the barriers to the expansion of *Eucalyptus* spp. plantations in Brazil (MENEZES et al., 2012). Aphids are among the most economically important groups of insects, with approximately 4,000 described species (CARDOSO, 2001). These insects cause direct and indirect damage to plants due to their feeding habit (sap-sucking), which may result in leaf damage (TARIQ et al., 2012). They may cause direct damage (e.g., when they are feeding on plants, affecting the apical regions, which may result on plants death) (QUEIROZ et al., 2010) or indirect (e.g., when they transmit viruses to plants). Furthermore, aphids may promote the spread of sooty mold due to the excretion of honeydew (LEITE et al., 2011).

The aphid *Myzus persicae* (Sulzer, 1776) (Hemiptera: Aphididae) has been found in 50 families, including 500 species of host plants distributed worldwide (PEÑA-MARTINES, 1992). In Brazil it is popularly known as *pulgão-verde* (literally green-aphid) and often occurs in cruciferous, cucurbits and solanaceous plants, being considered a key pest of cotton, tobacco, papaya, potato, tomato, eggplant and pepper plantations (GALLO et al., 2002). In Diamantina region (Minas Gerais state, Brazil), this aphid has been found attacking cabbage [*Brassica sylvestris* (L.) Mill.] and sweet potato [*Ipomoea batatas* (L.) Lam.] (CASTRO et al., 2013).

The objective of this study was to report the first occurrence of *M. persicae* (Sulzer, 1776) in *Eucalyptus urophylla* S. T. Blake seedlings grown in a greenhouse in Diamantina.

The aphids were found in *E. urophylla* seedlings that were being grown in a greenhouse at the Departamento de Agronomia of Universidade Federal dos Vales do Jequitinhonha e Mucuri (UFVJM), in Diamantina. The seedlings were being grown in hydroponic system with compressed air for aeration and nutrient solution as proposed by CLARK (1975), prepared with pure reagents. The mean temperature and relative humidity during the experiment at the greenhouse were 26.6°C and 46%, respectively.

The presence of *M. Persicae* (winged and aptera forms) was found 30 days after the installation of the seedlings in the greenhouse, at the three layers of the seedlings canopy (upper, middle and basal leaves). The leaves that were being attacked by these aphids showed necrotic spots. The presence of sooty mold was also observed below the leaves. Although this was the first finding of this species of aphid in *Eucalyptus* spp., there are records of the occurrence of *M. persicae* in other species of Myrtaceae. These records include the genera *Callistemon* spp. and *Calothamnus* spp. (BLACKMAN; EASTOP, 2006). In addition, there are records of aphids in *Eucalyptus* seedlings, but they were not identified (PRIVET et al., 2009).

This record is very important, and justifies the inclusion of this insect in integrated pest management programs of *Eucalyptus* spp., in order to prevent that *M. persicae* becomes a pest in this crop. This aphid has a large host range in the field and the presence of extensive areas planted with *E. urophylla* in the Minas Gerais state may contribute to a possible adaptation.

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