Aleurodicus talamancensis, a new whitefly species damaging plantation bananas in Costa Rica, with discussion of a montane orchid-feeding population (Sternorrhyncha, Aleyrodidae)

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Abstract

A new species of *Aleurodicus* Douglas is described from Costa Rica. It is a serious pest of plantation bananas in low-altitude areas of Limón Province. A single population from an orchid plant in high altitude montane forest differs in several respects, but is thought to be conspecific and is discussed in detail. This new species is discussed in relation to two similar species which together form the distinctive *A. niveus* Martin species-group.

Key words. Bananas, plantations, pest, orchid, *Aleurodicus talamancensis*, *A. niveus*-group, Costa Rica

Introduction

Extensive plantations of bananas (*Musa* cultivated varieties) are grown in the low-lying coastal plains of Limón Province, Costa Rica. Between 1999 and the time of writing, considerable damage to cultivated banana plants has been caused by a whitefly species whose immature stages feed on the lower surfaces of the mature leaves and secrete white, waxy material (Douglas Cubillo, personal communication). These secretions are extremely unsightly (Fig. 14), adding to the direct damage caused by extensive sap loss, combined with secondary damage due to the sooty mould that often develops on the excreted honeydew. Whiteflies rarely develop on fruits, even when eggs are sometimes laid on fruit surfaces (personal observations).

Many whitefly pests that suddently emerge in economically damaging numbers turn out to be new introductions, a phenomenon that in recent years has frequently concerned