The woolly whitefly, *Aleurothrixus floccosus* (Maskell) (Hemiptera: Aleyrodidae), a potentially serious citrus pest, recorded from South Africa

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A whitefly that has been noticed over the last two years on many lemon trees in suburban gardens of Cape Town and in Stellenbosch, has been identified as the woolly whitefly, *Aleurothrixus floccosus* (Maskell). This is the first record of this species from South Africa. Subsequently, it has been found all the way along the broad coastline from Stellenbosch to Port Elizabeth, and is apparently even more widespread in South Africa, as it was found on a lemon tree in a Pretoria garden during May 2009.

This whitefly was first described from Jamaica in 1896 (Martin & Mound 2007) and was noticed in Florida in 1909. In 1996 it spread to California where an attempt to eradicate it was unsuccessful (Kerns 2003). It now also occurs in many other countries of the world, including France, Italy, Spain, Japan, Taiwan, India, Nigeria, Angola (Evans 2007), Kenya, Tanzania, Uganda, Zambia and Malawi (Löhr 1997), and is considered a serious citrus pest. It may also attack guava and a variety of other host plants (Evans 2007).

The insects occur on the abaxial surface of fully-expanded citrus leaves and may cover the entire surface as a woolly mass (Fig. 1). This mass consists of the sedentary immature stages and the woolly filaments and honeydew they secrete.

Initially its appearance is pure white, but later signs of the black sooty mould fungus (*Capnodium* sp.) can be seen. The immature stages and the mobile adults suck the phloem sap and heavy infestations may cause the leaves to drop.

The biology of the species was studied by Paulson & Beardsley (1986), who found that at 22.5 C the whitefly took 27.4 days to reach adulthood after hatching from the egg and passing through four nymphal stages. Adults lived for 36 days and laid an average of 53 eggs. Kerns et al. (undated), however, stated that as many as 200 eggs are typically laid. The sausage-shaped eggs are deposited in a circular pattern and attached to the leaf with stalks (Paulson & Beardsley 1986).

The woolly whitefly has several parasitoids that in other countries may afford good biological control, making it unnecessary to use insecticides. The principal species in the U.S.A. are *Cales noacki* and...