



Tropentag, October 9-11, 2007, Witzenhausen

“Utilisation of diversity in land use systems:
Sustainable and organic approaches to meet human needs”

Woolly Whitefly: A Guest Invasive Alien Insect Pest of Citrus Fruits in Ethiopia

EMANA GETU

Addis Ababa University, Biology, Ethiopia

Abstract

Citrus fruits are among the most important horticultural crops grown in Ethiopia both for home consumption and generating cash for the family which can be used for purchasing clothes, paying school fee and medical insurance among other things. Citrus fruit production system in Ethiopia ranges from one tree to thousands which are owned both by private farmers (small and large scale) and government. With the increasing trends of citrus fruits production in Ethiopia a number of limiting factors come on board. These limiting factors include soil fertility, invasive weed, diseases and insect pests. Some of these problems resulted in abandoning of citrus farms. However, as the citrus ecosystem is an stable ecosystem some of the problems like the insect pest problems, are counterbalancing with their natural enemies, so that intolerable losses can not be reached most of the time especially with indigenous pests. This is not true for exotic pests like woolly white fly. The woolly whitefly, *Aleurothrixus floccosus* (Maskell), is a new invasive alien insect pest of citrus fruits recorded in Ethiopia in 2001 around Nazareth. Woolly whitefly was recorded in Ethiopia on all citrus fruits, guava and coffee. The pest sucks phloem sap, causing leaves to wilt and drop when populations are large. Honeydew droplets collect dust and support the growth of sooty mold. Heavy infestations where copious amounts of honey dew are produced can result in the blackening of entire trees. Honeydew and sooty mold can also contaminate the fruit. According to the survey made since the occurrence of the pest, it has invaded Central Rift Valley starting from Dukem down to Shashemene. In western Ethiopia, the pest invaded Ambo and Bako. During the survey a pupal parasitoid, *Cales noacki* Howard was recorded on woolly whitefly. In this paper, description of woolly whitefly aided by pictures, its current status in Ethiopia, GIS map showing its spread, and some experiences in the management of the pest both in Ethiopia and elsewhere will be discussed.

Keywords: , citrus fruits, damage, GIS, invasive, natural control, sooty mold, spread, woolly whitefly