



Factsheet

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Spiraling whitefly *Aleurodicus dispersus*

Exotic threat to Western Australia

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Background

Spiraling whitefly is not a fly at all, but related to the aphids. Its name is derived from the silken spirals that the female produces when laying her eggs on foliage and fruit. Spiraling whitefly has a high reproduction and dispersal rate. Its recent introduction into northern Queensland poses a major threat to the banana, tropical fruit tree, vegetable and ornamental industries, and increases the risk of its introduction to Western Australia. The pest does have natural enemies such as the parasitic wasp *Encarsia* which is effective in an integrated management approach.

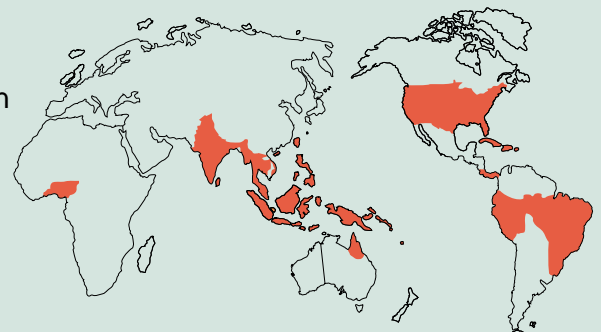


SPIRALS, ADULTS AND NYMPHS ON BANANA

PHOTO: DPI QUEENSLAND

Distribution

Native to the Caribbean region of Central America, Spiraling whitefly is now also present in the USA (southern Florida) the West Indies and South America. It has also been reported in Africa and the Canary Islands as well as Hawaii, India, Sri Lanka, Thailand, Vietnam, Singapore, Philippines, the Maldives, Samoa, Cook Islands, Fiji, Guam, Micronesia, Nauru, Taiwan, Indonesia, Papua New Guinea and Malaysia, as well as the Torres Straits and Queensland in Australia.



DISTRIBUTION



Potential impact

There are no published measurements of yield losses. However, damage due to direct feeding, cosmetic damage due to white flocculence and indirect damage from excreted honeydew that encourages the development of sooty moulds are all considered to be factors in the economic impact of Spirlinging whitefly infestations.

In Costa Rica and Hawaii the high level of sooty mould coverage of banana foliage has caused premature leaf-drop and has been related to reduced yields. The egg spirals and sooty mould on fruit can usually be removed by post-harvest washing.

Plants affected

Spiraling whitefly is highly polyphagous and is common on many different families of shrubs and trees. Hosts include citrus, avocado, guava, plantain, banana, coconut, soyabean, cassava and stone fruit. In Florida it has been recorded from 38 genera in 27 plant families. In Taiwan a total of 144 species of host plants in 64 families are listed, and in Indonesia, researchers reported spiraling whitefly attacking 22 plants in 14 families, including ornamentals, shade and fruit trees and annual crops.

Season of occurrence

Spiraling whitefly inhabits all growth stages of host plants. Populations are low over summer, and generally higher over the autumn and winter period.

Symptoms

When Spirlinging whitefly are abundant they can easily be seen on leaves due to the white flocculence that covers their bodies. They are found on the undersides of leaves, often associated with sticky honeydew and sometimes sooty mould growth. Spirlinging whitefly females produce characteristic spirals. These spirals resemble fine cotton wool, and mostly contain (microscopic) eggs. Spirals are usually found on the underside of leaves, but in heavy infestation may also be found on the upper leaf surface, fruit and non-plant material.



PHOTO: M. COCK, CABI BIOSCIENCE

THE ADULTS ARE MOTH-LIKE IN APPEARANCE AND MODE OF FLIGHT



PHOTO: DPI QUEENSLAND

HEAVY INFESTATION ON BANANA

