

Pest Alert

Occurrence of Woolly Whitefly *Aleurothrixus floccosus* (Maskell) in India

Occurrence of the highly polyphagous woolly whitefly, *Aleurothrixus floccosus* (Maskell) (Hemiptera: Aleyrodidae) on guava (*Psidium guajava* L.) was recorded in India. This whitefly is believed to be of Neotropical origin but is now found throughout the warmer parts of the world, wherever citrus is grown. It is reported to be feeding on more than 20 plant families and exhibits a strong preference for citrus species. The whitefly specimens were initially collected from different places in Kerala by scientists of University of Agricultural and Horticultural Sciences, Shivamogga; morphological and molecular identification was carried out at Institute of Wood Science and Technology, Bengaluru and NBAIR, Bengaluru. The identification of *A. floccosus* was done through taxonomic studies on morphological characters of puparium and reconfirmed through DNA barcoding of adult whitefly using partial (658 bp) mitochondrial cytochrome oxidase 1 (CO1) gene. This species is quite distinct from *Aleurothrixus trichoides*, the other already invaded known species of *Aleurothrixus* in India by the submargin without band of microtubercles; submarginal/subdorsal fold almost concentric with margin, arranged in distinct sections and complete between vasiform orifice and puparial margin. The determined slides are deposited in the collection of ICAR-NBAIR (Acc. No NBAII/HEM-ALEU/8-12/2019). The whitefly sequence was submitted to GenBank (acc. no MN027508) and our sequence has matched 98% nucleotide identity with available *A. floccosus* sequence (accession no. KF059956) submitted from Colombia. The first nymphal instars are light green in colour and subsequent stages turn brownish in colour with slight to heavy wool like covering of wax filaments. Different life stages of *A. floccosus* are shown in figure (a-d). The adult is yellow-white body and wings that are covered with a white waxy powder and they prefer to feed and oviposit on the undersides of young leaves.

No natural parasitism either by any indigenous parasitoid or its known potential aphelinid parasitoid (*Cales noacki*) was observed in India. The polyphagous nature of the non-native *A. floccosus* warrants immediate stringent quarantine protocols to prevent its further spread to other guava and citrus growing areas in India.



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