PREFERENCE OF SCIRTOTHRIPS DORSALIS (THYSANOPTERA : THRIPIDAE) HOOD ON SEVERAL PHENOLOGICAL STAGES OF MANGO 'ARUMANIS 143': IMPLICATION FOR CONTROL

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ABSTRACT

The production and quality of Indonesia's 'Arumanis 143' mango have been on the decline due to the serious infestation of *Scirtothrips dorsalis* Hood. Laboratory studies were done to determine the preference of *S. dorsalis* on several phenological stages of mango. Collection of mango samples was conducted in a mango plantation in Situbondo, East Java, Indonesia, between June to August 2015. Subjecting *S. dorsalis* to different food sources, a series of choice tests (based on choice and no-choice tests) on growth stages of mango were undertaken to determine the host preference on growth stage. T-test analysis was performed to determine the significant difference between the two choices of host. Results showed that *S. dorsalis* preferred flushes to flower, flushes than dormant leaves, and favored flower over dormant leaves. The host preference was determined by color, water and nutrient contents; diameter of stomata, and morphological surface of the host. The research implies that control strategies should be applied in the early emergence of young shoots to avoid initial population build up.

Keywords: mango, phenological stages, *Scirtothrips dorsalis*, preference