

## POPULATION DYNAMICS OF MAJOR INSECT PESTS OF JACKFRUIT IN KERALA UNDER FIXED PLOT SURVEY

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### ABSTRACT

Fixed plot surveys were carried out during 2016-2019 for assessing the population dynamics of major pests of jack fruit under ICAR-AICRP on Fruits project. *Cerambycid* defoliators like *Oberea artocarp*, *Epepeotes uncinatus*, *Macrochenus isabellinus*, and *Glenea multiguttata* were high (5-25%) during monsoon period in the fixed plot. Infestation of fruit and shoot borer was conspicuously very low (0.5-1.0%). Sporadic incidences of gregarious leaf caterpillar (*Margaronia bivitalis*) closely followed the attack of cerambycid defoliators. Breadfruit mealy bugs (*Icerya aegyptica*) were keenly attended by red ants for the honey dew they secrete and protected them from predators and parasitoids. Both nymphs and adults of spittle bug (*Clovio lineaticollis*), were observed on growing young shoots causing severe leaf crinkling and shoot damage with high incidences during June to October (5-15%). The Large stem borer, *Batocera rufomaculata* and *Mactochenus isabellinus* were noticed (10-20%) to lay eggs into tree trunks and primary branches during monsoon season (June-September). Adult beetles are known as defoliators of tender leaves and grubs tunnel in to the heartwood killing the branches as they grow. Gregarious chrysomelid beetles (*Monolepta* spp.) infested the leaves during the months of June and July (>10%). Severe denuding of shoots by long horned grasshopper or katydid was sporadic during June- August (10-20%) coinciding with profuse leaf formation and maturation with fully grown winged adult emergence during September.

Keywords: Major insect pests, jackfruit, population dynamics, fixed plot survey, Kerala