

Thrips infesting flowers of cowpea, yard-long bean and mung bean at selected localities in Monaragala district of Sri Lanka

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In southern Sri Lanka, information on flower-infesting thrips in food legumes is scarce. In this study, species composition, distribution and degree of damage in flowers of cowpea, vard-long bean and mung bean were determined at 35 farmer fields located in Monaragala District. The survey was conducted over a period of one year and each farmer field was surveyed only once during the study. Fourteen cowpea and yard-long bean, and seven mung bean fields at six major locations, i.e., Thanamalwila, Hadapanagala, Athimale, Buttala, Kudaoya and Monaragala, were sampled. At least five plants per field were randomly selected and at least three flowers were sampled per plant. Collected adult thrips were slide-mounted and identified using Lucid keys. Megalurothrips usitatus was the only thrip species present in all three legume species. Thrips infestations were found in all the fields sampled. In Cowpea, at seven fields (representing 50% of the fields), 100% of the sampled plants had thrips infestation while in yard-long bean, ten fields (71%) had 100% infestation. In mung bean, only two (28.57%) had 100% infestation. Among the flowers of three legume species, the highest overall flower infestation (78.06±5.61%) was found on yard-long beans followed by cowpea (73.64±5.31%). In mung bean, the flower infestation was 66.03% (± 8.26%). Infestation in open flowers was found to be significantly higher than in flower buds with the highest infestation (69.6±3.59%) in yard-long bean. The highest percentage of bud infestation $(32.02 \pm 7.93\%)$ was recorded on mung beans.

Key words: Food legumes, infestation, Megalurothrips usitatus

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