

Survey on Sorghum Pests, Their Natural Enemies and Alternative Hosts in Sorghum Growing Tracts under Rice Fallow Situation of Guntur district

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ABSTRACT

A survey was conducted in sorghum growing tracts under rice fallow situation of Guntur district during 2014-15. The data on incidence on sorghum pests, their natural enemies and alternative hosts was collected from randomly selected fields from each village. Among the popular private sorghum hybrids, cultivated Mahalaxmi 296 is mostly cultivated by farmers as it recorded higher yields (5200 to 7000 kg/ha) compared to others under zero tillage in rice fallows. Surveys were conducted at vegetative, grain formation and harvesting stages of sorghum. Among the sorghum pests, stem borer was observed predominant. At vegetative stage, the stem borer infestation was ranged from 1.0 to 2.0% dead hearts, 10.0 to 40.0 larvae/ plant, 9 to 21% leaf damage and 20.0 to 40.5% tiller damage. At grain formation stage the infestation was 4.5 to 9.5 larvae/plant were recorded but leaf damage and tiller damage were not recorded. At harvest stage recorded 3.8 to 8.0 larvae/plant, 1.31 to 3.26% stem tunneling and 2.5 to 6.4% chaffy grains. The data on carry over population of stem borer on sorghum stubbles after harvest ranged from 05 to 20 larvae and 3-15 pupae for 100 stubbles. The natural enemies on sorghum pests coccinellids and spiders. Among coccinellids, *Chilomenus sexmaculata*, *Cycloneda sanguinea* and among the spiders *Oxyopes* spp., *Argiope anasuja* (Thorell), *Chrysilla* sp. and *Oxyopes salticus* were predominant in sorghum ecosystem but, predatism was not noticed in the field conditions. In maize, the carry over population ranged from 0.0 to 4.0 larvae and 0.0 to 3.0 and pupae per stubble and in *Sorghum halopense* 0.0 to 3.0 larvae and 0.0 to 2.0 pupae per stubble were recorded under farmer's field conditions.

Key words : Alternative hosts, Natural enemies, Survey, Stem borer damage.