Research Paper:

Insect Pest Status of Pearl Millet (*Pennisetum glaucum* (L.) R. Br.) in Karnataka R.A. BALIKAI

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SUMMARY

Correspondence to:
R.A. BALIKAI
Department of
Agricultural
Entomology, College of
Agriculture, University
of Agricultural Sciences,
DHARWAD
(KARNATAKA)

INDIA

Survey work carried out over four years revealed that a total of 26 insect and 2 non-insect pests were found feeding on pearl millet in Karnataka, India. Out of these, none of them was recorded as major pest (>51% incidence) on this crop, where as eleven pests were recorded as moderate pests (31-50%). As many as ten insect pests were recorded as minor pests (11-30%) on this crop, while seven were recorded as negligible pests (<10%). Among the moderate pests, the adults and nymphs of shoot bug, *Peregrinus maidis* (Ashmead) were found gregariously on peduncle and also in compact earheads leading to chaffy earheads. The blister beetles such as *Cylindrothorax tenuicollis* (Pallas), *Psalydolytta rouxi* Cast and *Mylabris pustulata* (Thunberg) assumed greater importance by recording moderate level of incidence. The sucking pests like *Nezara viridula* Linn. and *Dolycoris indicus* Stal. were recorded as negligible pests and caused damage by sucking sap from the milky grains.

Pearl millet (*Pennisetum glaucum* (L.) R. Br.) is a major staple crop of north Karnataka. In Bijapur district alone the crop is being cultivated in large areas. Insect pests are one of the important constraints in increasing pearl millet production. Over 100 species of insect pests have been reported to be associated with this crop. However, Prem Kishore and Solomon (1989) listed about 25 species of potential insect pests of cropping systems in India based on pearl millet. The work on the insect pest status of pearl millet in Karnataka is meagre, hence, an attempt has been made to know its insect pest status.

Key words:
Pearl millet,
Pennisetum
glaucum, Insect
pest status

MATERIALS AND METHODS

Field survey was carried out for four consecutive years (2004 to 2007) to know the pest status in pearl millet crop in Bijapur and Bagalkot districts of Karnataka where pearl millet is being cultivated on large areas. The roving survey was taken up during different stages of the crop growth on farmer's fields to record pests. While, the insect pests noticed during various stages of crop growth were also recorded from the crop raised in the Regional Research Station, Bijapur. The data on the incidence of various insect pests were recorded with the help of following index (Balikai, 2000).

Infestation level	Category
Less than 10%	Negligible pest
11 to 30%	Minor pest
31 to 50%	Moderate pest
More than 51%	Major pest

RESULTS AND DISCUSSION

In all the fields surveyed, majority of them were sown during June-July and harvested during September-October months. Survey work carried out over four years in two districts revealed that a total of 26 insect and 2 non-insect pests were found feeding on pearl millet. Out of these, none of them was recorded as major pest on this crop with infestation varying from high to very high degree (> 51%), where as eleven pests were recorded as moderate pests. As many as ten insect pests were recorded as minor pests on this crop, while seven were recorded as negligible pests (Table 1).

Grasshoppers were observed more in number near the bund side from where they migrated to the crop. Three grasshoppers viz., Atractomorpha crenulata Fab., Hieroglyphus nigrorepletus Bol. and Oxya velox F. devoured the leaves leaving only midribs. The adults and nymphs of shoot bug, Peregrinus maidis (Ashmead) were found gregariously on peduncle and also in compact earheads leading to chaffy earheads. The activity of ant, Camponotus compressus Fb. was also observed along with shoot bugs. The leaf roller

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