



**RESEARCH ARTICLE :**

## Evaluation of germplasm against major lepidopteron pest in sunflower

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**ARTICLE CHRONICLE :**

**Received :**

05.07.2017;

**Accepted :**

22.07.2017

**SUMMARY :** In the Indian subcontinent the sunflower (*Helianthus annuus* L.) crop is fast expanding to different agroecological niches and cropping systems due to its wide adaptability. Among biological constraints in the sunflower production, pests dominate the scenario. A diverse assemblage of both beneficial and harmful insect species is associated with the sunflower ecosystem. Though more than fifty insect species have been reported on sunflower, cutworms (*Agrotis* spp.), sucking pests, leaf and plant hoppers (*Amrasca biguttula biguttula* Ishida, *Empoasca* spp.), thrips (*Thrips palmi*), whitefly (*Bemisia tabaci* Gennadius), defoliators (*Spilosoma obliqua* Walker, *Spodoptera litura* Fabricius, and *Plusia orichalcea* Fab.) and capitulum borer (*Helicoverpa armigera* Hubner) are major pests of economic concern. Therefore, the present experiment was undertaken to screen the available germplasm of sunflower for resistance to defoliators (*Spilosoma obliqua* Walker, *Spodoptera litura* Fabricius, and *Plusia orichalcea* Fab.), and capitulum borer (*Helicoverpa armigera* Hubner), which may be further used for conversion in to resistant hybrids, in Augmented Block design consisting of 4.5 m row of each germplasm with infester row of susceptible check (morden). Among entries screened, the population of defoliators (*Spodoptera*, *Trichoplusia* and *Spilosoma*) was moderate ranged between 0.53(GMU-973)- 1.48/plant (GMU-902) and *Helicoverpa* 0.1 to 1.20 /head. The entries GMU-942 and 948 has minimum incidence *i.e.* 0.1 larva/head of sunflower.

**KEY WORDS :**

Sunflower, Screening, germplasm lines and defoliators, Capitulum borer

**How to cite this article :** Jayewar, Nareshkumar E., Gosalwad, Sadashiv S. and Sonkamble, Milind M. (2017). Evaluation of germplasm against major lepidopteron pest in sunflower. *Agric. Update*, 12(TECHSEAR-1) : 62-67; DOI: 10.15740/HAS/AU/12.TECHSEAR(1)2017/62-67.

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