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Major Insect Pest of Groundnut

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The groundnut (*Arachis hypogeae* L.) is an important legume food crop in India. It is also known as peanut, earthnut, monkey nut, and goobers (Beghin et al 2003).

1.Red hairy caterpillar, Amsacta albistriga (Walker) and Amsacta moorei (Butler)

This is a serious and devastating pest of rainfed groundnut crop. It is an endemic one and its seasonal outbreak in various areas is largely dependent on the climatic conditions and the local agricultural practices of the areas.

Marks of Identification (Larvae): - Hairy caterpillar reddish brown with black band on either end having long reddish brown hairs all over the body. Adult: Moth with white wings. Forewing - white with brownish streak all over and yellowish streak along the anterior margin and head Hind wing – white with black marking

Symptom of Damage These hairy caterpillars scarp the under surface of the leaf when they are in neonate stage. Later the scrapped patches of the leaves can be easily detected. Full grown larvae devour the entire foliage, flowers and growing points.



Figure 1 - Red hairy caterpillar

2. White grub, Holotrichia consanguinea (Blanchard)

The insect appeared as a pest of groundnut in 1957 in the Gujarat State and is now distributed in U.P., Bihar, Haryana, Himachal Pradesh, Rajasthan and Punjab.

Marks of Identification -The grubs when full grown are about 35 mm long and are white, having a brown head and prominent thoracic legs. The adult beetles are dull brown and measure about 18 mm in length and 7 mm in width.

Nature of damage: The grubs eat away the nodules, the fine rootlets and may also girdle the main root, ultimately killing the plants. At night, the beetles feed on foliage and may

Yadav et al. (2023)

completely defoliate even trees like; Neem (Azadirachta indica) and Banyan (Ficus bengalensis).



Figure 2 - White grub

3. Groundnut aphid, Aphis craccivora (Koch)

This is one of the most serious pests of groundnut. It also attacks peas, beans, pulses, safflower and some weeds.

Marks of Identification The winged adults are soft-bodied insects with black wings

Nature of damage The nymphs and adults suck the sap, usually from the underside of leaves. Infestation in the early stages causes stunting of the plants as well as reducing their vigour. When the attack occurs at the time of flowering and pod formation. The aphid is also vector of rossette disease of groundnut.



Figure 3 - Groundnut aphid

Management

cultural practices

1.Red hairy caterpillar

- Deep ploughing of fields during summer.
- Timely sowing should be done.
- Field sanitation, rogueing.
- Crop rotation with sorghum or pearl millet or maize will reduce pest infestation.

2. White grub

- Deep summer ploughing with pre-monsoon showers to expose grub and pupa to predation by birds.
- Set up a light trap @ 1 / ha or bonfires to attract and kill the adults on receipt of summer showers.
- Collect and destroy the adult beetles harboured in neem and Ailanthus trees near groundut fields in the evening hours using powerful petromax lights
- Adequate irrigation in endemic areas reduce the grub attacks on roots

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1.Red hairy caterpillar

Chemical control
Spray nuclear polyhedrosis virus (NPV) @ 6 x 1012 POB/ac For grown up caterpillars apply, quinalphos 1.5 DP @ 10 kg/ac
2. White grub Apply Carbofuran 3 CG 13.3 kg/ac
3. Groundnut aphid Spray imidacloprid 17.8 SL @ 40 - 50 ml/ac

References

- 1. Dabhade, P. L., Bapodra, J. G., Jethva, D. M., Rathod, R. T., & Dabhi, M. V. (2012). Estimation of yield losses due to major insect pests of groundnut in Gujarat. *Legume Research-An International Journal*, *35*(4), 354-356.
- 2. Amin, P. W. (1983). Major field insect pests of groundnut in India and associated crop losses.
- 3. Biswas, G. C. (2014). Insect pests of groundnut (Arachis hypogaea L.), nature of damage and succession with the crop stages. *Bangladesh Journal of Agricultural Research*, *39*(2), 273-282.