

Insect Pests of Mango and Their Control

ARTICLE ID: 0243

Shravan Kumar

Student, School of Agricultural and Environmental Sciences, Shobhit Deemed University, Meerut (U.P.)

www.agrirootsmagazine.in

ISSN: 2583-9071

Mango (*Mangifera indica* L.) is one of the most important tropical fruit crops, widely cultivated for its delicious taste,

nutritional value, and economic importance.

However, the productivity of mango is severely affected by several insect pests which damage flowers, leaves,

shoots, and fruits. These pests not only reduce yield but also deteriorate fruit quality. Hence, understanding their biology and adopting proper control measures is essential for sustainable mango cultivation.

Major Insect Pests of Mango

1. Mango Hopper (*Idioscopus spp.*)

Scientific Classification

Kingdom: Animalia

Phylum: Arthropoda

Class: Insecta

Order: Hemiptera

Family: Cicadellidae

Nature of Damage: Both nymphs and adults suck sap from inflorescences, causing drying of flowers and

poor fruit set. Their sugary excreta encourages sooty mold growth, which reduces photosynthesis.

Control Measures: Spraying of neem oil (3%) during

flowering. Application of Imidacloprid (0.005%) or Thiamethoxam (0.01%). Orchard sanitation and pruning to improve aeration.

2. Mango Fruit Fly / Seed Weevil (*Sternuchus mangiferae*)

Scientific Classification

Kingdom: Animalia

Phylum: Arthropoda

Class: Insecta

Order: Coleoptera

Family: Curculionidae

Nature of Damage: The grub bores into developing fruits and feeds on the seed kernel, leading to premature fruit drop and internal rotting.

Control Measures: Collecting and destroying fallen fruits. Bagging of young fruits. Spraying of Carbaryl (0.2%) or Lambda-cyhalothrin (0.01%) before fruit maturity.



3. Mango Mealybug (*Drosicha mangiferae*)

Scientific Classification

Kingdom: Animalia

Phylum: Arthropoda

Class: Insecta

Order: Hemiptera

Family: Pseudococcidae

Nature of Damage: Both nymphs and adults suck sap from shoots and inflorescences, causing wilting and flower drop. Honeydew secretion supports the growth of sooty mold.

Control Measures: Installation of grease bands on tree trunks to prevent upward movement of nymphs. Release of predators like *Cryptolaemus montrouzieri*. Spraying of Dimethoate (0.05%) in case of severe attack.

4. Mango Stem Borer (*Batocera rufomaculata*)

Scientific Classification

Kingdom: Animalia

Phylum: Arthropoda

Class: Insecta

Order: Coleoptera

Family: Cerambycidae

Nature of Damage: Grubs bore deep tunnels inside stems and branches, causing drying of twigs and, in severe cases, death of the tree.

Control Measures: Cutting and burning of infested branches. Injection of Dichlorvos or kerosene into boreholes, followed by mud sealing. Maintenance of orchard hygiene.

Integrated Pest Management (IPM)

For effective and eco-friendly control, IPM practices should be adopted, which include:

- Regular monitoring of pest populations.
- Use of neem-based biopesticides.
- Encouragement of natural enemies.
- Cultural practices such as pruning, sanitation, and timely irrigation.
- Need-based application of chemical insecticides.

Conclusion

Mango cultivation is threatened by a wide range of insect pests, among which mango hoppers, fruit flies, mealybugs, and stem borers are the most destructive. Effective management requires an integrated approach combining cultural, biological, and chemical methods. Adoption of Integrated Pest Management (IPM) not only ensures better control of pests but also promotes sustainable and profitable mango production.

References

1. Atwal, A.S. & Dhaliwal, G.S. (2008). Agricultural Pests of South Asia and Their Management. Kalyani Publishers, Ludhiana.
2. Kumar, R. (2017). Insect Pests of Fruit Crops. Biotech Books, New Delhi.
3. Pruthi, H.S. (1998). Textbook of Agricultural Entomology. ICAR Publication, New Delhi.
4. Rahman, M.A. & Miah, M.R.U. (2018). Insect pests of mango and their management strategies: A review. International Journal of Entomology Research, 3(1), 01–07.

5. Tandon, P.L. (2000). Insect Pests of Mango and Their Control. Indian Council of Agricultural Research, New Delhi.