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MOONG CROP INSECT PEST CONTROL

Abstract: Moong crop is a prominent legume crop grown in India, China, and Southeast Asia. It is susceptible to a variety of insect pests, which can result in severe productivity losses and quality deterioration. Farmers must utilize an integrated pest management (IPM) method to control insect pests. Aphids are small, soft-bodied insects that feed on plant sap, stunting growth, distorting leaves and stems, and withering them. To manage aphids, farmers should use resistant types, monitor their crops regularly, use targeted sprays of water or insecticidal soap, and use biological control. Pod borers are caterpillar-like insects that bore into pods and feed on maturing seeds, resulting in severe yield losses. Farmers can use pheromone traps, plant-based solutions, biological control, and chemical control to reduce their population. Whiteflies are tiny flying insects that feed on plant sap, causing leaves to yellow, wilt, and distort. Farmers can use physical control, natural enemies, and chemical control to manage them. An integrated pest management method is necessary to grow healthy and profitable moong harvests indefinitely.

Key words: mong, pests, insect, control, crop, biological control, aphids.

Language: English

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Introduction

Moong crop, also known as mung bean, is a prominent tropical and subtropical legume crop grown in India, China, and Southeast Asia. It is regarded for its excellent nutritional content, low input prices, and income creation possibilities. However, moong, like any crop, is susceptible to a variety of insect pests, which can result in severe productivity losses and quality deterioration. Farmers must utilize an integrated pest management (IPM) method to control insect pests in moong crops, which incorporates numerous tactics to target the pest while minimizing the use of chemical pesticides. Here are some of the most common insect pests of moong, as well as recommended control methods.

Aphids are small, soft-bodied insects that feed on plant sap, stunting growth, distorting leaves and stems, and withering them. They also expel honeydew, which promotes the formation of fungal diseases. Farmers can employ the following strategies to manage aphids in moong crops. Use resistant types: Some moong varieties have been cultivated or chosen for aphid resistance. Farmers can select these cultivars to reduce the likelihood of aphid infestations.



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Pic.1. Aphid's moong

Farmers should monitor their crops on a frequent basis for the presence of aphids, particularly on fragile shoot tips and growth points. Early discovery can aid in the prevention of the infestation's progress.

Farmers might employ targeted sprays of water or insecticidal soap to wash away or kill aphids. To keep aphids away from the plants, they can employ sticky traps or reflecting mulch. Use biological control: Aphid natural enemies such as ladybirds, lacewings, and parasitic wasps can help lower aphid populations. Farmers can boost the presence of these beneficial insects in their fields by planting nectar-rich blooms or releasing them.

Pod borers are caterpillar-like insects that bore into pods and feed on maturing seeds, resulting in

severe yield losses. Farmers can employ the following strategies to control pod borers in moong crops.

Use pheromone traps: Farmers can use traps that produce sex pheromones to attract male pod borers, reducing their mating and egg-laying activities.

Plant-based solutions, such as neem oil, garlic extract, or chilli powder, can be used by farmers to deter or kill pod borers. Spray these items on the leaves and pods. Biological control: Pod borers' natural enemies, like as parasitic wasps, can help lower their population. Farmers can boost the presence of these useful insects by planting nectar-rich blooms.



Pic.2 Pod borers moong

Whiteflies are tiny flying insects that feed on plant sap, causing leaves to yellow, wilt, and distort. They also expel honeydew, which attracts sooty mold and inhibits photosynthesis. Farmers can use the following strategies to manage whiteflies in moong crops: Make use of physical control: Whiteflies, like aphids, can be washed away or killed with insecticidal soap or water. Farmers can also repel them using sticky traps or reflecting mulch.

Natural enemies of whiteflies, such as parasitic wasps, predatory bugs, and fungal pathogens, can help



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control their population; farmers can release these beneficial organisms or encourage their presence by avoiding broad-spectrum pesticides. Use chemical control as a last resort: If other methods fail or the infestation is severe, farmers can use selective insecticides that target whiteflies, such as neonicotinoids or insect growth regulators. Finally, insect pest control in the moong crop necessitates a combination of techniques aimed at preventing, monitoring, and suppressing pest populations while limiting the impact on the environment, human health, and beneficial creatures. Farmers may grow healthy and profitable moong harvests indefinitely by using an integrated pest management method.

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