

## Discover the Fauna of Our

Kingdom: Animals (Animalia)

Phylum: Arthropods (Arthropoda)

Class: Insects (Insecta)

Order: Diptera

Family: Anthomyiidae

Genus: *Pegomya*

Species: (*Pegomya hyoscyami*)

The Beet leafminer (*Pegomya hyoscyami*) is one of the most dangerous pests of sugar beet, fodder beet, and spinach crops. This insect is widely known as the "leafmining fly" because it creates tunnels called "mines" inside leaves. While it resembles a common housefly, it is smaller and more delicate (5–6 mm) with an ash-gray body.



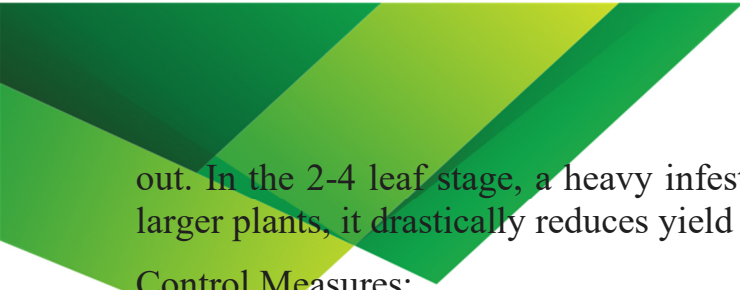
### Biological Characteristics:

The larvae are legless, headless, and worm-like, appearing white or slightly yellowish with a length of 7–9 mm. The pest spends the winter in the pupal stage at a depth of 5–10 cm in the soil. In spring (late April or early May), the flies emerge to feed on weeds or beet sprouts. Female flies lay white, elongated eggs in groups of 2–5 on

the underside of the leaves.

### Damage Characterization:

The damage caused by the beet leafminer is very distinctive. Upon hatching, the larvae immediately bore into the leaf tissue. They consume the soft mesophyll between the upper and lower layers of the leaf. This creates swollen, light-colored patches. Eventually, these "mines" expand and turn brown, causing the leaf to dry



out. In the 2-4 leaf stage, a heavy infestation can completely destroy the plant. In larger plants, it drastically reduces yield and sugar content.

**Control Measures:**

Deep plowing in the autumn is essential to destroy the pupae resting in the soil. Additionally, clearing wild weeds related to the beet family helps prevent the fly from multiplying. If more than 4–5 larvae are found per leaf, systemic insecticides should be applied; these penetrate the leaf to kill the larvae hidden inside. Because this fly can produce 2–3 generations per season, constant monitoring of the fields throughout the summer is required.

