

Discover the Fauna of Our Campus

European corn borer (*Ostrinia nubilalis*)

Order: Lepidoptera (moths and butterflies)

Family: Crambidae

Genus: *Ostrinia*

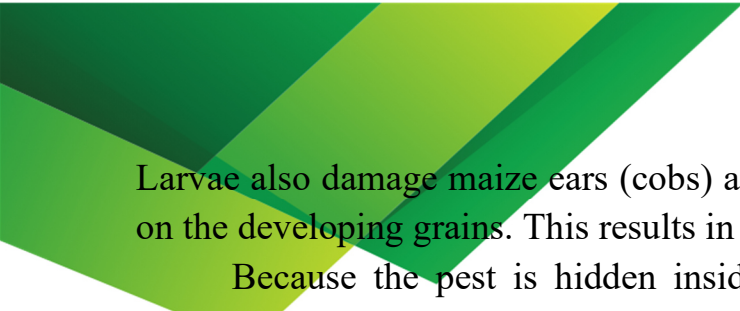
Species: *Ostrinia nubilalis*



The European corn borer (*Ostrinia nubilalis*), also known as the corn stalk borer, is a hidden but highly damaging agricultural pest. It affects not only maize but also crops such as hemp, sorghum, cotton, and various thick-stemmed weeds.

The adult moth has a wingspan of about 25–30 mm. Males are usually darker brown, while females are lighter in color, often yellowish-ochre. The wings show two distinct wavy dark bands. The body is greyish-yellow with darker longitudinal stripes on the dorsal side, and the head is dark brown. Larvae overwinter inside maize stalks or other plant residues in the late caterpillar stage. In spring, they pupate, and adults emerge. Females lay their eggs in clusters of 15–50 on the underside of maize leaves. A single female can produce 200–600 eggs. The moths are mainly nocturnal and are attracted to light.

The damage caused by this pest is particularly serious because it lives inside the plant. After hatching, larvae first feed on leaves and then bore into the stem, creating long tunnels inside. This disrupts nutrient flow and weakens the plant, making it prone to breaking under wind.



Larvae also damage maize ears (cobs) and tassels by boring into them and feeding on the developing grains. This results in direct yield loss and reduced grain quality.

Because the pest is hidden inside plant tissues, control is more difficult. Removing crop residues after harvest and deep plowing helps destroy overwintering larvae and significantly reduces populations. Resistant maize hybrids are recommended. Releasing egg-parasitic wasps such as *Trichogramma* during the egg-laying period is highly effective, as they destroy eggs from within. Chemical insecticides are most effective when applied before larvae enter the stem; once inside, control becomes much less effective. Without proper management, yield losses can reach 20–50%.

