

Western corn rootworm is a serious threat to corn

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Attention: The Western corn rootworm has already settled not only in Dobrudzha, but has also been observed in the Yambol and Plovdiv regions!

This dangerous pest can compromise the yield of this important agricultural crop and should by no means be underestimated. August is the month when it can be predicted whether it has permanently established itself in the maize stands, if it has not already “done its job” in spring. At that time, in May, larvae hatch from the overwintered eggs in the soil. They immediately move towards the plant roots – after gnawing them, they make tunnels in them and sever them. This is, in fact, the basis of the economically significant damage.

The Western corn rootworm is a highly invasive species of major economic importance

By mid-June the adults begin to fly, and the mass flight occurs in July and August. The beetles have an elongated yellow body, black head and antennae, and a pale yellow pronotum. The elytra (forewings) are pale yellow, yellow-green to yellow-brown with large dark spots, sometimes covering almost the entire surface. They are punctured in rows.

The body length is 4.2–6.8 mm. They chew long strips in the leaves – damage that resembles that caused by the cereal leaf beetle. When the maize comes into flowering, you will notice the beetles on the tassels and silks, on which they feed.

And silks destroyed before pollination are a guarantee that the cobs will be empty or, at best, with underdeveloped or fewer kernels.

Control

Control of the Western corn rootworm is mainly carried out with granular products during sowing or during ridging and inter-row cultivation.

Economic injury level (EIL):

For adults at silk emergence it is 3–5 individuals/plant or 10–15 individuals/trap/day (one trap per 50 decare).

Registered products: Avant 150EC – 25 ml/decare; Belem 0.8MG – 1.2 kg/decare (applied during sowing with a special microgranule applicator attached to the seed drill); Force Evo (former Diastar Maxi) – 1.2–1.6 kg/decare; Ercole GR – 1200–1500 g/decare; Colombo Pro MG – 1.2 kg/decare (applied during sowing at a depth of 4 cm); Microseed Geo – 1.2–1.5 kg/decare; Lebron 0.5G – 1–2 kg/decare; Soilgard 1.5 GR – 1.22 kg/decare; Trika Expert – 1200–1500 g/decare – localized soil application along the row during inter-row cultivation.

For control of adults during the mass flowering of maize the following are approved: Deka EC – 50 ml/decare; Decis 100EC – 12.5 ml/decare; Lamdex Extra – 56–100 g/decare; Meteor 60–80 ml/decare, but other contact, fast-acting insecticides may also be used. The problem at this time is that the plants are already 3–4 m high, which makes it difficult for the spray solution to reach the silks of the lowest cobs. Therefore, farmers who have

established an infestation by the Western corn rootworm this year must already carefully consider their control strategy for the next season, bearing in mind exactly where their maize fields will be located.

Rule No. 1 – to “abandon” monoculture cultivation

Observance of proper crop rotation is the best means of reducing the population density of the pest and not only of it, but also of all its “fellows” that overwinter in the soil and will not “delay” their attack on the plants in early spring.