

Bicious wheat bug – a dangerous pest of cereals

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The sunn pest (*Eurygaster integriceps Put.*) is one of the most dangerous pests of cereal crops. It usually damages wheat most severely, attacks barley, oats and rye to a lesser extent, and very rarely maize. It overwinters as an adult under the fallen leaves in oak forests. In spring it becomes active and begins to migrate to cereal fields at temperatures above 11–12 °C. Initially, the adults suck sap from the stems of young plants, as a result of which the central leaf turns yellow, twists and dries out. Later, when temperatures rise, the bugs suck sap from the upper parts of plants that have not yet headed. The pests pierce the sheath of the last leaf and suck sap from the ear. Above the puncture site, the ear whitens, spikelets do not form, the rachis becomes deformed and the awns become curled. Immediately after heading, sunn pests suck sap from the stem above the last node.

The larvae begin to hatch at different times in different years; those of the first instar do not feed, while those of the other instars suck sap from the glumes and grains. The ratio between larval instars depends on the meteorological conditions in the region, the microclimatic conditions of the crop, the developmental stage and varietal characteristics of the wheat. In varieties that form their generative organs earlier, larval development is accelerated.



Adults of the new generation appear at the end of June and the beginning of July. They feed normally at air temperatures from 18 to 30 °C and humidity up to 55% until full saturation. The summer migration of the bugs starts after mid-July and continues until about October.

The harmful activity of the sunn pest covers two stages. During the first stage the bug damages the stems of cereals, many of which die. During the second stage the grains are affected. Damaged grains have lower absolute and hectolitre weight, which affects both the yield level and the germination capacity of seed material.

Strategy for control of the sunn pest

Regular weed control, ploughing of fallow areas and field margins, and destruction of shrubs and solitary trees in the field have an adverse effect on egg parasitoids.

Control of overwintered bugs should be carried out when the ratio between male and female individuals is 1:1 and the population density exceeds 2 individuals per 1 m². Control against larvae starts when 30% of them have reached the third instar and the density exceeds 2 individuals per m².

Authorised plant protection products

The following insecticides are registered for control of the pest: Karate Zeon 5 CS – 15 ml/da; Gazelle 20 WP – 12.5 g/da; Mavrik 2F Effeur 2F – 20 ml/da; Mospilan 20 SP – 12.5 g/da; Inazuma – 15 g/da;

Oasis 5 EC/Sumi Alpha 5 EC – 25 ml/da – Adults – at 2 adults/m²

Larvae – when third-instar larvae predominate until the appearance of fourth-instar larvae.