

Sowing 2022

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Rapeseed is the first crop to start in the autumn sowing. The optimal sowing time is towards the end of August. However, since soil moisture is a limiting factor, in the case of prolonged drought it is necessary to wait for the first September rains. Depending on the region where this crop is grown, it should be borne in mind that before the onset of winter frosts the plants must have formed a rosette with 6–8 leaves and a well-developed root system. We hope that you have complied with the rapeseed's "requirements" for the soil to be well prepared, without clods, because the seeds are very small and require a firm seedbed. With the basic tillage you should have applied the phosphorus and potassium fertilizers, while nitrogen fertilizers are mandatory for top dressing. The nutrient status of the soil and the fertilization rate are most accurately determined after soil analysis of each specific field. It is already mid-October and the rapeseed sowing is a fact, so we only mark it. But from now on

begin the care activities for the emerged rapeseed plants, which are threatened by dangerous pests and diseases that can compromise the yield. Which are they?



Turnip sawfly – *Anthalia rosae*

Damage

In autumn, the third generation of the pest develops. The adult sawflies fly until the end of October and lay their eggs on the cotyledons and the first true leaves. The young larvae feed on the underside of the leaves, gnawing them in the form of small pits. As they grow, they chew holes in the leaf blades, which gradually enlarge, they also make peripheral gnawings, and later they consume the entire leaf blade, leaving only the main veins. After completing their development, the larvae burrow into the soil and remain there to overwinter.

Control

Chemical control is carried out at an economic threshold of 2–3 larvae/m² or 2–3 damaged plants/m².

Registered insecticides for control: KARATE ZEON 5 CS – 15 ml/da; CITRIN MAX – 5 ml/da.



Rape stem flea beetle – *Psylliodes chrysocephala*

Damage

The pest is widespread and at high population density causes enormous damage. It develops one generation per year. It overwinters as egg, larva and adult insect. In September the adults begin to feed intensively and from the end of this month until mid-December they lay eggs. The newly hatched larvae initially bore into the epidermis of the stems, and later into the petioles and central veins of the leaves. Some of them hatch in the spring. A similar species to the rape stem flea beetle is the **Small rape stem flea beetle**. Other harmful species on rapeseed are the **black, light-legged, wavy-striped, flax, hemp** and other species of **flea beetles**.

Control

Chemical control is carried out at a damage threshold of: **2 adults/m² at emergence; 4 adults/m² after appearance of the 3rd leaf; 3–5 larvae per plant**. Registered insecticides for control: DEKA EC – 30 ml/da; MAVRIK 2 F – 20 ml/da; CITRIN MAX – 5 ml/da.



Rape leaf beetle – *Entomoscelis adonidis*

Damage

The beetles attack early-sown rapeseed and feed on the leaves. At high population density they can thin the stand. In a long and warm autumn with little rainfall, the larvae are harmful. They feed on the leaf mass of rapeseed, completely destroying it and leaving only the veins.

Control

Control is carried out at a damage threshold of: **2–3 beetles/m² at emergence.**



Rape stem weevil – Ceuthorrhynchus picitarsis

Damage: The larvae of the pest are harmful; they make tunnels in the leaf petioles and then pass into the stem. In weak plants with thin and short leaf petioles they reach the central part of the stem and bore into the growing point as early as autumn. Such plants die or do not form central stems, but only lateral ones.

Control: Chemical control should be carried out at a population density of: **2–4 beetles/m²**. Registered insecticides for control: MAVRIK 2 F – 30 ml/da; CITRIN MAX – 5 ml/da.



Dry stem rot (Phoma stem canker)

Pathogen: *Leptosphaeria maculans* – fungus

Symptoms

The disease in rapeseed manifests from plant emergence to the 6-leaf growth stage. On the lowest leaves irregular rounded, greyish-green spots are formed with small black dots on them (pycnidia of the pathogen). The spots gradually necrotize and cover the leaf petioles and the stem. Infection of the stem occurs directly at or above the soil surface. Phoma also attacks the crown, where dark spots appear, leading to drying out and death of the plants. The disease develops in patches in the crop and under favourable conditions very quickly spreads over the entire field.

Life cycle

The pathogen survives in plant residues and partly in rapeseed seeds. The development of Phoma stem canker is favoured by rainy and humid weather and an optimal daytime temperature of 22–24 degrees.

Control

Balanced fertilization should be applied and pests on rapeseed should be controlled, since their damage serves as an entry point for infection. Autumn application of fungicides significantly reduces the frequency and severity of infection, as well as the risk of plant winterkill. Registered fungicides for control: KARAMBA 60 EC – 120 ml/da; ORIUS 25 EW/DYNASTY 25 EW/TEBUMAX 25 EW – 50 ml/da; PICTOR SC – 50 ml/da with 20–40 l/da spray solution; FOLICUR 250 EW/HORIZONT – 50–100 ml/da.