

Ring rot of potatoes – a treacherous disease

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The symptoms of this disease are very often confused with symptoms caused by fungal pathogens – powdery mildew, verticillium wilt, or rhizoctonia. The natural aging of plants, as well as mechanical damage caused by some agrotechnical interventions, have similar manifestations.

This can mislead producers and cause them to misdirect control measures. Therefore, crops should be carefully monitored. And in case of any doubt, a specialist consultation should be sought.

The causal agent of ring rot is a bacterium – ***Clavibacter michiganensis subsp.sepedonicus***, which attacks only potatoes. Infected plants slowly wilt, which is most noticeable after flowering. The leaf margins curl upwards spoon-like, the surface loses its shine and turns from gray-green to yellow. Later they become necrotic. The stems crack and discolor – a greasy exudate oozes from the tissues in a cross-section. If the tubers are cut

lengthwise, yellow-colored zones are observed in the vascular tissues/ring/ near the eye. Later, the entire vascular ring darkens. When the tubers are squeezed, a creamy substance oozes in streams from the vascular ring.

The primary way the bacterium is transmitted is through infected planting material. Sources of infection are containers, work equipment, and storage facilities. The bacterium can remain viable for 63 months.

Control

- It is mandatory to use healthy planting material, accompanied by a phytosanitary passport!
- And as mentioned at the beginning, crops should be carefully monitored and the help of a specialist must be sought to accurately diagnose the disease.