

Late blight in potatoes (*Phytophthora infestans*)

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Late blight is the most economically important fungal disease of potatoes. It attacks all above-ground parts of the plants at the flowering stage.

Leaves

On the lower leaves, large, watery, chlorotic spots appear, covered on the underside with a sparse, white sporulating growth. Later, the spots scorch and the leaves dry out.

Tubers

On the tubers the spots are lead-grey, slightly sunken, with necrotic rusty-brown tissue beneath them. In the case of inadequate control, the plants become defoliated and dry out. The pathogen develops in the presence of

critical periods:

Rain lasting for two days – not less than 10 l/m²;

Temperature - 10 – 25⁰C;

Relative humidity – 78-82%;

Cloudiness above 8-10 tenths during the following 2 days;

Dew or fog – retention of water droplets on the plants for more than 4 hours.

At harvest, diseased tubers are difficult to recognize. The first symptoms appear after 2-3 weeks in the form of sunken lead-grey spots of irregular shape. The flesh beneath the spots is rusty-brown. Infected tubers stored under dry conditions become mummified, while under humid conditions they are attacked by the causal agents of soft rot and Fusarium and decay. It overwinters in diseased tubers and in plant residues.

Control

Treatment with PPPs in the presence of critical periods.

Authorized PPPs:

Enervin SC – 120 ml/da; Equation PRO – 40 g/da; Infinito SC – 120-160 ml/da; Ridomil Gold R WG - 500 g/da; Pencozeb 80 WG – 200 g/da; Polyram DF – 180-200 g/da; Simbal 45 WG - 25 g/da; Filder 69 WG – 200 g/da; Acrobat Plus WG – 200 g/da; Alfil Duplo – 90-400 g/da; Valbon – 160 g/da; Vitene Triplo R – 400-450 g/da; Vitra 50 WP, Cuprohyd 50 WP – 150 g/da; Darmun SC – 80 ml/da; Dimix 500 SC – 30-36 ml/da (in combination with a product containing mancozeb); Dithane DG – 200 g/da; Corsate Max WP - 150 g/da; Cuproxat FL, Tribase Flowable - 300 ml/da; Laincobre M – 240-600 g/da; Mancozeb 80 WP - 250 g/da; Manfil 75 WG – 210 g/da; Moximat 505 WG – 240-300 g/da; Pencozeb 80 WG – 200 g/da; Simbal Flow – 50 ml/da; Taegro WP - 18.5-37.0 g/da; Folpan 80 WDG - 150 g/da; Champion 50 WP, Champ 50 WP, Macc 50 WP – 150 g/da.