



Potato Late Blight, Negative prognosis

FACTSHEET

Potato late blight can cause severe damage to the potato crop and tubers

Potato late blight, caused by the fungus-like organism Phytophthora infestans causes severe damage to the foliage and can infect the tubers at harvest.



Control with help of DSS on platform.ipmdecisions.net

The DSS is designed to guide the timing of the first late blight fungicide application, when used in combination with other agronomic risk factors. The DSS uses weather data to estimate the 'epidemic free' period ('negative prognosis') by calculating the accumulated blight risk from the date of crop emergence. The model guides the first spray timing at the end of the 'epidemic free' period. Other agronomic factors than weather, such as time of row closure, cultivar susceptibility, the presence or absence of blight inoculum sources, are not included in the risk estimate. It is not applicable to potatoes grown under protection.

DSS parameters

From the date of crop emergence, daily risk values are accumulated based on weather data (temperature, relative humidity and precipitation). The risk is an accumulated value of how the weather affects late blight germination/infection, sporulation and growth. All processes are corrected for inhibition due to drying. After the accumulated risk has reached certain thresholds, there is likely to be moderate or high blight risk.

DSS output

Potato late blight Risk status High Low of 10607022 09060202 09060202 0006020 0006020 000602 0006002 00060000 00000 000000 00000000	Negative prognosis 🚺	
	Infection risk 160 140 120 100 100 100 100 100 100 10	Guidance • This risk model guides the timing of the first fungicide application by calculating accumulated blight risk from the date of crop emergence. Click on 'Edit Parameters', enter your crop emergence date and 'Save'. When accumulated risk is less than 120 (green), the risk of blight is low. Between 120 and 150 (orange), there is a risk of blight if other risk factors (a o sources of blight inoculum
	SHOW DATA LEGEND Aggregated Infection risk Infection threshold	

Where can DSS be used

The DSS was first introduced by Schrodter and Ullrich in Germany in the 1970s and has been widely used in Europe since. After the original paper by Ullrich, J. & Schrödter, H. (1966), the negative prognosis model was tested in other countries (e.g. by Taylor M. C. 2003 in the UK) and was commonly combined with other models to guide subsequent fungicide applications. Combined models, such as NegFry, have been tested in many countries, e.g. by Hansen J. G. et al., 1995 in Denmark;

NEED MORE INFORMATION?

platform.ipmdecisions.net

Follow us at

- **@IPMD**ECISIONS
- **f IPM D**ECISIONS
- in IPM DECISIONS



www.ipmdecisions.nl