

# Potato late blight – a foe for gardeners and farmers

Whether it's a couple of plants or a couple of acres, blight will find your crop.

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**P***hytophthora infestans*, potato late blight, was a major contributing factor to what became the Irish Great Famine between 1845-1847. Rarely mentioned today, other than during the blight warnings issued by Met Éireann as part of their forecast bulletins, it nonetheless continues to have the potential to devastate potato crops.

In the 177 years since the famine, we have developed control programmes to limit blight's destructive potential. These programmes have been developed by improving our understanding of the disease and by adapting our systems to mitigate its destructive potential.

*P. infestans* can find crops like no other plant pathogen. It produces vast quantities of spores, which manifest as the white fluffy appearance that often is observed on the under surface of an infected potato leaf.

These spores are blown in the wind and land on susceptible leaves, where the spores germinate to release even more spores, with each individually going on to potentially cause infection. In damp and humid weather, this lifecycle can occur in the space of a few days. It's easy to understand how single infections in late autumn 1845 spread across the entire country in a couple of months.

So, in most summers, if no control programme is in place, almost all crops will get blight. Whether just a couple of pots or a couple hundred hectares, blight will find the potato plants.

Commercial growers are aware of the potential consequences of late



blight, as it is their business. Costly, weekly fungicide applications are often required from the point of crop emergence through to desiccation.

Growers take other steps to limit blight risk. They use certified, disease-free seed, they don't re-plant in the same field to prevent disease carryover, they'll manage previous crops' discards to limit potential infection sources and they'll intensively monitor crops to ensure any infection is rapidly identified and stopped.

These are the basic steps of integrated pest management (IPM), which is an essential part of modern potato production. But growers need help in managing sources of infection which are out of their control.

We ask that small-scale growers and gardeners, irrespective of the size of their plot, to beware of conditions favourable for blight, and if blight is present, to take action to ensure it doesn't spread further.

In recent years, Teagasc has been working with Met Éireann and Maynooth University to improve the late blight warnings issued throughout the summer. These predictions are now even more accurate and location specific ([www.met.ie/forecasts/blight-forecast](http://www.met.ie/forecasts/blight-forecast)).

These forecasts help guide decisions on when to apply a fungicide. If you prefer not to use fungicides, the warning can be used to help identify when to inspect the plants (three to four days after a risk period).

Any infected plant material should be removed and destroyed in a manner that limits potential further spread, e.g by composting in a closed container.

Fortunately, widespread famine is no longer a threat in Ireland. But we have an obligation to protect the national crop against blight to avoid preventable loss of highly nutritious, and delicious food.