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Ralstonia Plagues Dutch Rose Industry

Chris Beytes

It's not the same *Ralstonia* that hit our geranium industry 14 years ago (that was Race 3, Biovar 2), but a serious outbreak of *Ralstonia solanacearum*, race 1, has been causing hardships for the Dutch cut rose industry. *GrowerTalks* colleague Ron van der Ploeg of *FloraCulture International* wrote the following report in his latest FCI BloomBrief:

The first outbreaks of the devastating bacteria were reported in August 2015. Now, 16 months later, bacterial wilt shows no sign of abating with a surge in new cases at two rose propagating farms.

The state-of-the-art rose farms of Holland—famed for their premium-quality blooms—which provide many of the roses exported to Europe, continue to be under attack by the devastating bacterium, more commonly known as bacterial wilt. The bacteria has now infected the yield of 15 companies and has no remedy other than uprooting entire crops and disinfecting tools and greenhouse surfaces as listed in the Plant Health Directive 2000/29/EC.

Sixteen months ago, it was identified at only one rose farm, which indicates just how fast it travels.

Ralstonia is an extremely difficult disease to combat and can quickly spread, primarily through the distribution and planting of infected, vegetatively propagated rose plantlets, but soil and water are also possible routes. The possible source of the outbreak is still unknown and under investigation.

Dutch rose professionals have joined forces to develop a plan of action: the Elimination Programme. Previously infected companies, which had to uproot their entire crop, have been under scrutiny. In some cases, companies have been declared *ralstonia*-free, while another company—recently cleared and disinfected—is waiting for the authorities to give the green light.

The loss in marketable yield can be significant. It is estimated that since the first outbreak of the disease, up to 18 ha of rose crops have been uprooted (five rose propagators and 10 commercial cut rose growers). Total loss runs into the millions of euros.

Meanwhile, the Dutch knowledge and innovation community, Topsector Horticulture & Propagation Materials—a consortium of horticultural companies, research institutes and universities—is making funds

available to initiate a three-year research project into *Ralstonia solanacearum* to increase knowledge of this dreaded bacterium. All parties involved hope that the project will be the first step towards greater sharing and coordination of research and data.

The potential consequences of *Ralstonia solanacearum* are major and could result in dramatic yield losses and costly control measures—not just in cut roses, but also in other ornamental crops, such as gerbera. Key areas the researchers will focus on are: prevention, diagnosis and treatment of affected crops. Top priority is given to the development of a cheap, reliable and quick diagnostic test to replace the current test method, which is rather time-consuming and expensive. **GT**