Mini data sheet on Curtobacterium flaccumfaciens pv. poinsettiae

Added to the EPPO Alert List in 2017 - Deleted in 2021

Reasons for deletion:

Curtobacterium flaccumfaciens pv. poinsettiae has been included in EPPO Alert List for more than 3 years and during this period no particular international action was requested by the EPPO member countries. In 2021-06, the Working Party on Phytosanitary Regulations agreed that it could be deleted, considering that sufficient alert has been given.

Why: Curtobacterium flaccumfaciens pv. poinsettiae was first described in 1942 in the USA and is associated with a disease causing leaf spots, stem rots and cankers on poinsettias. Considering the recent detection of the bacterium in Germany, its occasional findings in several European countries, and the conclusions of Dutch and German PRAs underlining the potential risks that the bacterium could present to glasshouse poinsettia production, the EPPO Secretariat decided to add this bacterium to the Alert List.

Where: very little information is available in the literature about the world distribution of *C. flaccumfaciens* pv. *poinsettiae*, and most records are now quite old and could not be confirmed by more recent publications. Therefore, the list below is only indicative and may not reflect the present situation of the bacterium in the listed countries.

EPPO region: Transient.

The bacterium has occasionally been reported from several countries. In the United Kingdom, it was isolated in 1984 but not reported since then. In Slovenia, it was detected in 2008 in a nursery on plant material which had been imported from Germany but has not been detected again. In Germany, it has occasionally been found in glasshouse nurseries but eradication measures have been applied in all cases (outbreaks detected in 2014 in North Rhine-Westphalia; 2016 in Lower Saxony and Baden-Württemberg have all been eradicated - an outbreak detected in 2018 in Schleswig-Holstein remains under eradication).

North America: USA (Alabama, California, Florida, Hawaii, Maryland, Nebraska, New Jersey, New York, North Dakota, Pennsylvania).

South America: Venezuela.

Oceania: New Zealand (North Island).

On which plants: poinsettia (Euphorbia pulcherrima) is the only known natural host.

Damage: the early symptoms are water soaked stripes on green stems which can spread to leaf-stalks and leaves. Leaf spots, defoliation, and brown discoloration of the vascular tissues are also observed. Golden brown liquid may drip from broken stems and leaf lesions. Severe infections lead to longitudinal fissures in the leaf-stalks. Cuttings from infected plants may develop poorly or fail completely. Data on the biology of this bacterium is generally lacking but the severity of the disease can be favoured by warm temperatures, moist conditions, and high nitrogen inputs. Latent infections can occur. No information is available on quantitative yield losses but it is reported that the disease may result in severe damage.

Dissemination: the disease is spread by infected cuttings, and probably by water splashes (e.g. with overhead irrigation), tools, and workers. Over long distances, the trade of infected plants is probably the most important pathway to introduce and spread the disease.

Pathway: plants for planting (including cuttings) of *E. pulcherrima* from countries where the bacterium occurs.

Possible risks: Poinsettias are popular indoor plants in the EPPO region, commonly associated with Christmas. Although data is generally lacking on the economic impact of *C. flaccumfaciens* pv. *poinsettiae* on poinsettia crops, the disease is reported to cause damage and once introduced in a production system, no curative treatments are available. Disease control relies on the rapid destruction of infected plants, application of strict sanitation measures (e.g. disinfection of surfaces, tools) and the use of healthy planting material. It is also noted that, as plants may be latently infected, testing of mother plants before taking cuttings would help contain the disease. In 2014, both the Dutch and German PRAs concluded that *C. flaccumfaciens* pv. *poinsettiae* could present a risk to poinsettia production. In the Netherlands, the NPPO concluded that growers should be informed about these risks and the bacterium was included in the national survey for 2015. In Germany, eradication measures (destruction of infected plants, disinfection measures) were taken as soon as the bacterium was detected. The overall lack of information about *C. flaccumfaciens* pv. *poinsettiae* renders risk analysis difficult and highly incertain, but it seems wise that those involved in poinsettia production are made aware of this disease.

Sources

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