

Mini data sheet on *Xanthomonas axonopodis* pv. *poinsettiicola*

Xanthomonas axonopodis pv. *poinsettiicola* was added to the EPPO A2 List in 2008. A full datasheet will be prepared, in the meantime you can view here the data which was previously available from the EPPO Alert List (added to the EPPO Alert List in 2004-deleted in 2008).

Xanthomonas axonopodis pv. *poinsettiicola* (Bacterial leaf spot of poinsettia)

Why	<i>Xanthomonas axonopodis</i> pv. <i>poinsettiicola</i> came to our attention, because it was reported for the first time in Europe, as a new leaf spot disease of poinsettia. Although little data is available on this pathogen, more particularly on its epidemiology, geographical distribution and economic impact, the EPPO Secretariat felt that it could present a risk to poinsettia crops.
Where	Leaf spot of <i>Euphorbia pulcherrima</i> was first described in India in 1951, and found later in Florida (USA) in 1962. EPPO region: Austria (found in 1 glasshouse in 2007 but all plants were destroyed, now considered eradicated), Czech Republic (found in 2007 in 1 glasshouse, eradicated), Germany (found in one pot plant in September 2003 in Hessen), Italy (first found in 2003 in Lazio, Lombardia in 2007). Asia: China, Cocos islands, India, Philippines (first reported in 1974), Taiwan (first reported in 2005). North America: USA (at least Florida). South America: Venezuela (first reported in 1996). Oceania: Australia (Queensland), New Zealand.
On which plants	Mainly on poinsettias (<i>Euphorbia pulcherrima</i>), but <i>E. heterophylla</i> , <i>E. milii</i> , <i>Codiaeum variegatum</i> and <i>Manihot esculenta</i> (all Euphorbiaceae) are also reported as host plants. When the disease was discovered on poinsettia in Florida in the 1960s, it was found that many, if not all, popular cultivars were highly susceptible to the disease, but since then no new work has been conducted to evaluate cultivar resistance.
Damage	Spots are at first visible on the underside of the leaf as grey to brown, water-soaked lesions. As they enlarge to 2-3 mm, they become visible on the upper side of the leaf. Leaf spots are chocolate brown to rust coloured and may be surrounded by a pale green to yellow halo. Spots may coalesce in some cases to form large areas of blighted tissues. Severe infections can cause distortion of new leaves as well as complete yellowing and finally abscission of older leaves. In Florida, it was described as causing commercial losses in outdoor production of poinsettias in the 1960s, but no recent data is available.
Dissemination	Little is known about the epidemiology of the disease, but it has been reported to spread rapidly within a crop, presumably from splashing water. Over long distances, trade of plants of <i>E. pulcherrima</i> can ensure spread of the bacterium.
Pathway	Plants for planting (including cuttings), pot plants of <i>E. pulcherrima</i> .
Possible risks	<i>E. pulcherrima</i> is grown for ornamental purposes in many countries of the EPPO region, particularly indoors. In addition, there is a large trade of propagating material (e.g. rooted cuttings). Control of <i>X. axonopodis</i> pv. <i>poinsettiicola</i> is very difficult in practice, and is almost entirely based on the elimination of all infected plants (e.g. copper compounds are partially effective). Although, data is lacking on the economic impact of this bacterial disease, it may present a risk to poinsettia nurseries and growers in Europe.
Source(s)	CABI Crop Protection Compendium, 2004. Chase, A.R. (1985) Bacterial leaf spot of <i>Codiaeum variegatum</i> cultivars caused by <i>Xanthomonas campestris</i> pv. <i>poinsettiicola</i> . Plant Pathology 34(3), 446-448. Compendium of Flowering Potted Plant Diseases (1995) M.L. Dauthrey, Wick, R.L.; Peterson, J.L. (eds), APS Press, 90 pp. Gottsberger RA, Plenck A (2008) First report of <i>Xanthomonas axonopodis</i> pv. <i>poinsettiicola</i> , the bacterial leaf spot pathogen on <i>Euphorbia pulcherrima</i> in Austria. New Disease Reports, Volume 17, February 2008 - July 2008. http://www.bspp.org.uk/ndr/july2008/2008-36.asp Hernandez, Y.; Trujillo, G. (1999) [Bacterial disease of poinsettia (<i>Euphorbia pulcherrima</i> Willd. ex Klotzch) in La Victoria, Aragua state, Venezuela]. Revista de la Facultad de Agronomía, Universidad Central de Venezuela, 25(1), 17-28 (abst.).

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EPPO RS 2004/175, 2005/043, 2007/107, 2007/117, 2007/214, 2008/126, 2008/141, 2008/142
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