

CropHealthMonitor
PlantDoctor
Camelia Japonica

Eurofins Agro
PO Box 170
NL - 6700 AD Wageningen
The Netherlands
T +31 (0)88 876 1014
F +31 (0)88 876 1011
E horti@eurofins-agro.com
I www.eurofins-agro.com

Example

Sample	Research-/ordernumber:	Date sampling:	Date report:	
	727974/004429360	26-07-2018	20-08-2018	
	Test code:	Receiving date:	Sample was taken by:	Contactperson sampling:
	780	31-07-2018	Third party	

Results The roots of the Camelia japonica are brown-black. Some roots are still white. The leaves are green, with some brown spots. The feet of the plants show brown vascular bundles. One plant also has a distinctive brown spot in the centre of the foot.

The plants have been tested for the presence of pathogenic fungi, using DNA-methods. The analyses showed that the plants are heavily infected with the fungi *Fusarium* spp., *Fusarium oxysporum*, *Fusarium solani*, *Pythium* spp. and *Colletotrichum* spp. Also *Pythium irregulare*, *Alternaria* spp., *Trichoderma* spp., *Trichoderma asperellum* and *Trichoderma hamatum* are present.

Fusarium solani can cause foot and stem rot.
Fusarium oxysporum is a vein pathogen which blocks the vascular bundles of the plant. The water and nutrient transport will stagnate and plants may wilt and turn yellow.
Pythium species are (mostly) secondary pathogens, which can infect weakened plants, and cause severe root rot.
Colletotrichum spp. can cause root rot, but is often a secondary pathogen.
Trichoderma spp. is an antagonistic fungus. Some subspecies can protect the roots of the plants from other, harmful fungi.

Based on the results we conclude that a combination of the *Fusarium* species is the primary cause of the rot of the Camelia japonica.

Remove infected plants and clean up plant remains. Ensure good drainage of the soil.
It is important to stimulate the growth of the plants, and to optimize environmental conditions.
Pythium spp. and *Fusarium* spp. can remain in infested plant material and soil for a long time. Therefore it is important to start with clean soil and healthy plants.
If possible, use disinfected water and give water from below in order to prevent the spread of spores. Spores of *Colletotrichum* spp., *Pythium* spp. and *Fusarium* spp. can easily be spread by (splash)water and irrigation.

Material upon arrival



Camelia Japonica

Method

The reported results only refer to the material supplied to Eurofins Agro.