



# Plant Doctor

## For an accurate and reliable diagnosis

When your plants are diseased or showing abnormalities, it is crucial to discover the cause of the issue as soon as possible. In crop management, rapid treatment and minimizing the risk of spreading the pathogen or pest are vital. The Plant Doctors of Eurofins Horti provide a thorough and reliable diagnosis, as well as offering guidance on possible measures.

There are many factors that can cause crop abnormalities, such as pathogens, fertilization mismanagement or unfavorable climate conditions. Based on visual assessment of the submitted crop material combined with careful evaluation of any information provided, the Plant Doctor identifies the necessary analyses for subsequent diagnosis of the sample.

*“Understanding the cause of the damage and advice on how to fix it”*

The Plant Doctors have a wide array of techniques at their disposal, including microscopy, ELISA and plating methods. Highly specific DNA-based methods, such as quantitative PCR, DNA Multiscan and DNA sequencing, are also commonly used for pathogen detection and identification.

### Easy-to-use service

The Plant Doctor service is easy to use. Make sure that the material is packed leak-proof and properly labeled. The Plant Doctors will inform you of the results of their examination as soon as possible. An interim contact is provided whenever required.

The report describes the analyses performed plus the most likely primary cause of the issue at hand, including recommendations for an effective solution. Duration of the analysis varies depending on the problem; ranging from a few days (e.g., ELISA, DNA techniques) to weeks for bio-assays or more extensive research. Submitting comprehensive information about crop management and symptoms accelerates the diagnosis process.

### INSIGHTS INTO CROP HEALTH

Eurofins Horti provides a range of analyses to diagnose suboptimal crop development or damages caused by pathogens. For this, you can send in different types of materials, such as plants, water samples, substrate and swabs.

#### PlantDoctor

When your crop has suffered damage, Plant Doctors will initiate a thorough investigation including fungi, bacteria, insects, pests, and viruses.

The duration of analysis varies based on the complexity of the issue. Direct communication upon sample receipt and when the results are available is possible. The analysis report will outline the problem description and offer recommendations for preventive measures, along with possible curative steps to be taken.

#### DNA Multiscan

This test entails a swift routine scan aimed at detecting and identifying a number of potentially harmful fungi and bacteria whose damage may not yet be apparent. Utilizing this DNA-based test, we can analyze water, substrates and crop material. Within three business days, you will receive an analysis report detailing the identified micro-organisms and their respective detection levels.

#### ELISA

A commonly used method for detecting viruses in plants is the enzyme-linked immunosorbent assay (ELISA). ELISA allows the rapid and accurate identification of specific viruses by detecting viral proteins in plant tissue. Eurofins Horti can detect a wide range of viruses. Not only the most common viruses in tomato, cucumber and sweet pepper, but also other viruses found in ornamentals, vegetables and woody crops.

#### DisinfectorCheck

To check the performance of your disinfectant, bacteria and fungi are counted in water samples collected before and after your disinfection unit. Results will be reported within five to seven business days.

#### Questions?

If you want to know more, our dedicated customer service team is available to assist you.

