

Phytophthora spp. Pocket Diagnostic[®] Datasheet

Intended Use

Phytophthora spp., which means plant destroyer, is a devastating fungus-like pathogen which affects crops, plants and trees - so devastating the following species, *P. ramorum* and *P. kernoviae*, are notifiable pathogens in the UK.

Phytophthora affects many regions throughout the world including the USA, Australia, Europe and Canada with some regions having dedicated *Phytophthora* monitoring programmes. *P. ramorum*, *P. lateralis*, *P. fragariae* and *P. kernoviae* feature in the European and Mediterranean Plant Protection Organisation (EPPO) A2 list of pests recommended for regulation as quarantine pathogens.

The fungus can spread by movement of infected plant material, contaminated soil, water or tools. It can also be spread by rain/water splash and airborne spores, which can survive in plant debris and soil for many years.

Phytophthora Pocket Diagnostic[®] is a rapid diagnostic test designed to be used in the field, nursery or glasshouse. The test can be performed in 10 minutes by operators with little training. Samples for testing can be taken from any part of the plant, at any stage during the production cycle. Pocket Diagnostic[®] test results form an important part of sound decision making in routine screening or disease control situations.

Common Names: Potato Late Blight, Tomato Late Blight, Ramorum Blight, Sudden Oak Death, Crown Rot, Root Rot and Lanarkshire disease.

Phytophthora[®] Test Kit Contents:

- Test device (x1)
- Bottle of extraction buffer (including ball bearing) (x1)
- Pipette (x1)
- Instructions for Use

Sensitivity

The *Phytophthora* Pocket Diagnostic[®] test is sensitive to a 0.4% infected leaf material per 0.2g

Quality Standards

Pocket Diagnostic[®] tests are manufactured in environmentally-controlled [lateral flow manufacturing](#) facilities by Forsite Diagnostics Ltd, trading as Abingdon Health, following procedures which meet ISO9001 quality standards and where possible validated to the European and Mediterranean Plant Protection Organisation (EPPO) standards.

Storage and Shelf life

Pocket Diagnostic[®] Kits should be stored at room temperature (do not exceed 40°C). Tests are supplied with at least 6 months shelf life.

Safety

The Pocket Diagnostic[®] rapid test device contains no hazardous materials to humans, animals, plants or crops. The accompanying extraction buffer contains a very small amount of sodium azide (0.05%) as a preservative – avoid ingestion and skin contact. Refer to your government guidelines for the disposal of sodium azide.

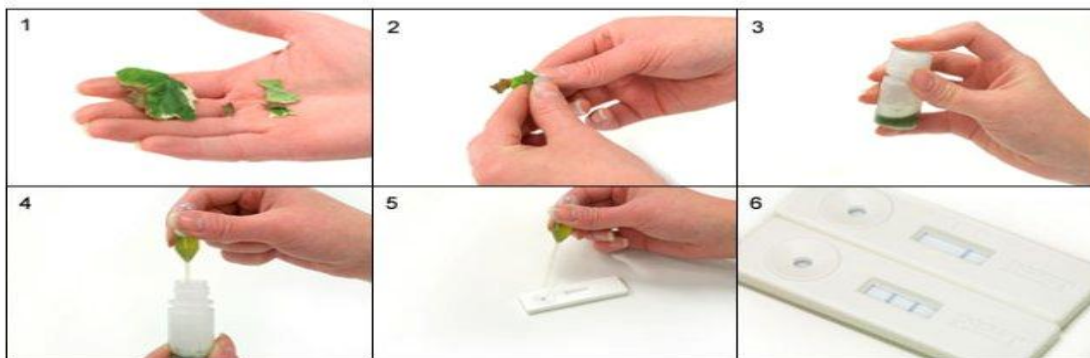
Disposal of used tests

In cases where positive or suspect positive results are obtained for quarantine or notifiable pathogens, all kit components should be regarded as contaminated and should be disposed of appropriately. Contact the Food and

Environment Research Agency (FERA) for further details on how to do this. If you are not based in the UK please contact your government plant pathology and plant pathogen quarantine department.

Test Procedure

1. Select sample. Where possible select a part of the plant where diseased and healthy material meet, do not use dead material. Use approximately 25mm square of material (See picture 1). Take care to avoid cross contamination between samples from hands or cutting tools.
2. Cut or tear sample into small pieces and put into bottle.
3. Shake firmly for 30 seconds (longer for more resistant samples)
4. Wait 30 seconds allow the solution to settle and draw liquid into pipette avoiding too much plant material.
5. Add 2-3 drops into sample well of test strip.
6. Read result after 10 minutes.



For more information about how to use Pocket Diagnostic[®] rapid tests please [visit our website](#).

Interpreting results

A line present next to the T (test line) indicates a positive result.

If the C line (control) does not appear the test has failed and must be repeated.

Ignore any changes to the result which occur after the 10 minutes has elapsed.



Technical Assistance

For technical assistance relating to the *Phytophthora spp.* test kit, or any other Pocket Diagnostic[®] test, please contact us at:

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Literature

1. Development of Potato-Virus On-Site kits for use by PHSI. (Danks C and Barker I. Central Science Laboratory, Sand Hutton, York, UK)
2. On-Site Detection of Plant Pathogens Using Lateral-Flow Devices. (C. Danks and I. Barker. 2000 OEPP/EPPO, *Bulletin OEPP/EPPO Bulletin*30, 421-426)