

# Potato Virus Y

## Pocket Diagnostic<sup>®</sup> Datasheet

### Intended Use

The *Potato Virus Y* Pocket Diagnostic<sup>®</sup> test kits are rapid diagnostic test designed to be used in the field, nursery or glasshouse. The test can be performed within minutes by operators with little or no training and will detect the three main strains of PVY: PVY<sup>C</sup>, PVY<sup>N</sup> and PVY<sup>O</sup>. Samples for testing can be taken from any part of the plant, at any stage during the production cycle. Pocket Diagnostic<sup>®</sup> test results form an important part of sound decision making in routine screening or disease control situations.

**Potato virus Y potyvirus (PVY)** is commonly found in potato crops. Symptoms vary widely between virus strain and potato variety. Most common symptoms seen in the field will be due to secondary (tuber-borne) infection and include stunting, leaf mottling, crinkling, yellowing and necrosis. Primary (current season) infection usually has mild symptoms or none at all.

**Common name:** potato severe mosaic virus

### Potato virus Y Test Kit Contents:

The test kits for Potato virus Y comes in following formats:

#### Box of 4: contains tests for one pathogen

- Test device (x4)
- Bottle of extraction buffer (including ball bearing) (x4)
- Pipette (x4)
- Instructions for Use

### Quality Standards

Pocket Diagnostic<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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.

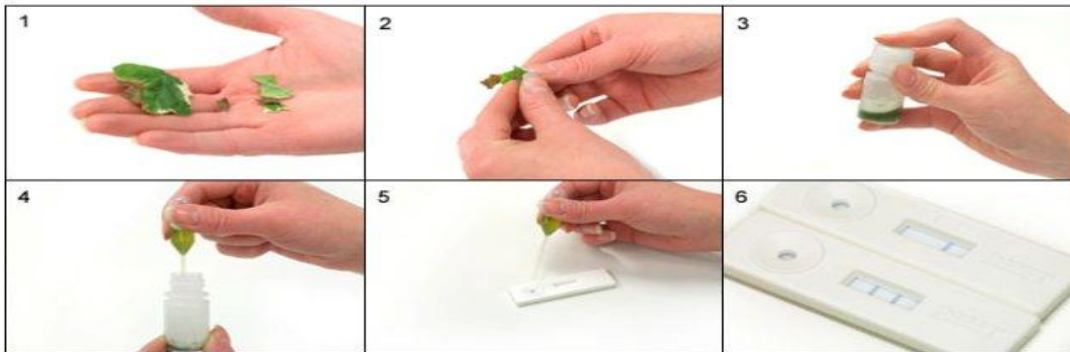
### Disposal of used tests

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<sup>®</sup> 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 any of the potato virus test kits, or any other Pocket Diagnostic<sup>®</sup> test, please contact us at:

#### Forsite Diagnostics Ltd trading as Abingdon Health

Sand Hutton

York

YO41 1LZ

United Kingdom

Email: [info@pocketdiagnostic.com](mailto:info@pocketdiagnostic.com)

Telephone: +44 (0) 1904 406060 Fax: +44 (0) 1904 462122

### Literature

1. 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)
2. Development of Potato Virus On-Site Test kits for Use by Plant Health Seed Inspectorate PHSI (Danks C and Barker I. Central Science Laboratory, Sand Hutton, York, UK).
3. Pregnancy Testing, Potatoes and Tomatoes: The Development of On-Site Test Kits for the Detection of Plant Viruses of Major Arable and Horticultural crops. (Danks C, Preston S, Shepherd V and Barker I. Central Science Laboratory, Sand Hutton, York, UK)