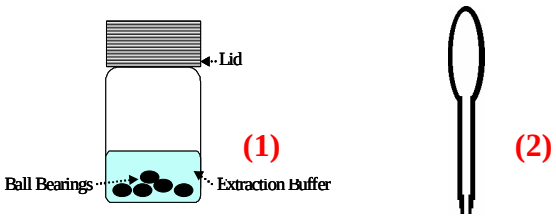
SPOT√CHECK LF™

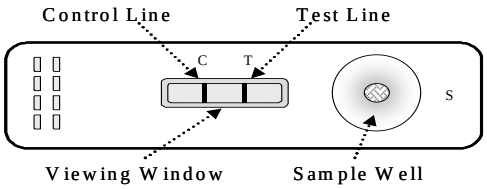
SPOT√CHECK LF™ is a new range of novel diagnostic tests for the on-site identification of important plant pathogens. Based on LATERAL FLOW immunoassay technology similar to that used in home pregnancy tests, they are very simple to use, rapid and reliable. Whilst they are great for field use, diagnostic laboratories can also use them to effect.

WHAT A KIT CONTAINS

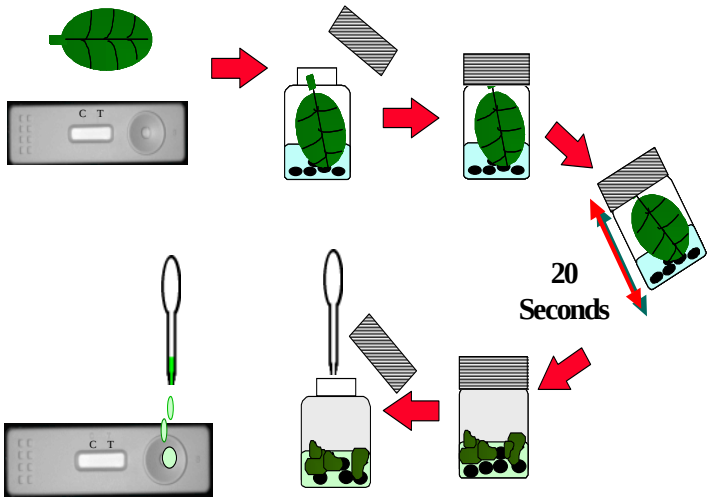
(A) 10 extraction systems each comprised of an EXTRACTION BOTTLE (1) containing extraction buffer and ball bearings for tissue maceration. TRANSFER PIPETTE (2) for adding the extracted sample to the LATERAL FLOW DEVICES.



(B) 10 LATERAL FLOW DEVICES sealed two together in foil bags (B).



STEP-BY-STEP ILLUSTRATION



CONDUCTING A TEST

Conducting a SPOT√CHECK™ test is simplicity itself. However, carefully following the recommended procedure will ensure that you get the very best from our products.

If you have any questions or concerns before, during or after conducting a test then please do get in touch. Contact details overleaf.

Step 1 - SAMPLE PREPARATION

- **Remove a leaf or piece of leaf (approx. 3cm x 4cm) which shows suspect symptoms.**

  TIP: Taking smaller pieces of leaf from several parts of the affected plant or plants to make a composite sample may give a better result.

- **Unscrew cap from EXTRACTION BOTTLE and place plant sample inside. Replace cap and screw tightly. Shake bottle vigorously for 20 seconds (buffer should have changed to pale green).**

  TIP: Using too much leaf can prevent adequate maceration. Also, too much maceration can cause excessive colour on the lateral flow device.

Step 2 - TESTING THE EXTRACT

- **Remove a LATERAL FLOW DEVICE from the foil pouch.**
- **Draw into the TRANSFER PIPETTE about half of the liquid in the EXTRACTION BOTTLE.**
- **Now add 2 drops to the sample well on the LATERAL FLOW DEVICE.**

  TIP: Lateral flow device must be maintained in a level horizontal position for the duration of the test. Adding more than the recommended number of drops may cause the device to flood, invalidating the result.

- **Sample drops should be absorbed in about 30 seconds and a blue dye will appear in the test window.**

  TIP: If blue dye does not appear try adding 1 more drop of extract to the sample well.

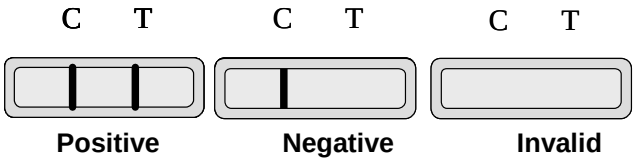
- **Wait until the blue control line (C) appears then read the result (see below).**

  TIP: If control line does not develop within 2 - 3 minutes, the device may be flooded. Repeat the test with a new device using only two drops. It could also indicate that the device has been exposed to wet or damp. Again retest the sample.

INTERPRETING THE RESULT

As soon as the control line clearly can be seen (2-3 minutes) read the result.

RESULT



The intensity of the blue colour on the sample line (T) will vary depending on how much of the pathogen is present in the sample extract. Providing the control line is a strong blue colour, then a faint sample line (T) can be interpreted as a positive.

Please note that a negative result indicates that the target pathogen was not present at detectable levels in the sample extract tested. However, a negative result could also mean that the sample tested is not representative of the problem or that the plant from where the tissue was taken was only recently infected. If in doubt conduct another test. If still in doubt submit a sample to a laboratory.

If you get an invalid result (no control line or lines green instead of blue), conduct a further test with a fresh device.

KITS AVAILABLE TO DETECT

- **Pepino mosaic virus (PepMV), tomato spotted wilt virus (TSWV), impatiens necrotic spot virus (INSV), tomato mosaic virus (ToMV), cucumber mosaic virus (CMV), tomato mosaic virus (ToMV), tomato yellow leaf curl virus (TYLCV).**
- **Potato viruses Y, X, A, S and V.**
- **Bacterial diseases – *Ralstonia solanacearum, Xanthomonas campestris* pv *pelargonii, Erwinia amylovora***
- **Plum pox virus (PPV)**
- **Fungal diseases - *Botrytis cinerea, Phytophthora* spp*, Rhizocotonia* spp*, Pythium* spp**

Please contact Neogen Europe Ltd for more information on these tests and others

IMPORTANT INFORMATION

- **Preservatives: The extraction buffer contains sodium azide (0.05%). This is a toxic substance and should be handled accordingly. Avoid ingestion and contact with skin. Materials Safety Data Sheet available on request.**
- **A small sachet of silica gel is enclosed in each foil pouch. Avoid contact with skin and keep away from children.**

STORAGE AND HANDLING OF DEVICES.

- **Sealed foil pouches can be stored at room temperature for up to 12 months.**
- **Once opened, the two devices contained in the pouch should be used as soon as possible. Exposure to moisture can cause rapid deterioration.**
- **Each device should be used once only.**
- **Take care when handling devices not to touch the test window.**

TECHNICAL SUPPORT

- **Comprehensive advice and technical support is available from:**

Neogen Europe Ltd, Cunningham Building, Auchincruive, AYR KA6 5HW, United Kingdom
Tel: + 44 (0) 1292 525275
Fax: + 44 (0) 1292 525477
e-mail: info@neogeneurope.com

TERMS AND CONDITIONS OF SUPPLY

The tests are supplied subject to Neogen Europe Ltd terms and conditions of supply. Copy available on request. Particular attention is drawn to the following.

The tests supplied are for the detection of the pathogen stated on the foil pack. The tests should be used to provide the basis for a presumptive diagnosis. A negative result cannot be taken as conclusive evidence of freedom from the specific pathogen under test. If in doubt, repeat the test or submit to a diagnostic laboratory for confirmation.

These products are for diagnostic use only. They are supplied and service, information and advice rendered, on the understanding that the customer is solely responsible for determining the suitability for the intended purpose. Neogen Europe Ltd shall not be liable for any indirect, special or consequential damages of any kind resulting from their use. The sole and exclusive remedy of the customer is limited to

the replacement of goods shown to be substandard.