

Agripalette® (Plant pathogen detection kit)

Instructions
for Use

For detection of melon yellow spot virus (MYSV) and

cucurbit chlorotic yellows virus (CCYV)

Introduction

Agripalette® is a colloidal gold immunochromatographic test kit for the detection of melon yellow spot virus (MYSV) and cucurbit chlorotic yellows virus (CCYV), using antibodies specific to each virus. The kit is designed for use with leaves of plants suspected of being infected. This kit is not designed for testing seeds or roots. Do not use it with these sample types.

Kit Contents

Package size: 10 tests (5 tests per pouch × 2 pouches). The table below shows the contents of one pouch.

Test strips (in a resealable foil pouch containing a silica gel desiccant)	5 strips
B2 extraction bags (each containing extraction buffer and a mesh)	5 bags
Dropper pipettes	5 pipettes

General Precautions

1. Use Agripalette in accordance with these Instructions for Use.
2. This kit is intended for the detection of MYSV and CCYV only. Do not use it to detect other pathogens, or for any other purpose.
3. A definitive diagnosis of MYSV or CCYV infection requires a comprehensive assessment that combines the result of this test with observation of the symptoms on leaves and the results of other diagnostic methods.

Sample Collection and Preparation

Before use, allow the refrigerated kit to reach room temperature while still in its packaging. Then remove one extraction bag for each sample to be tested. Perform all subsequent procedures at room temperature.

① Sample collection

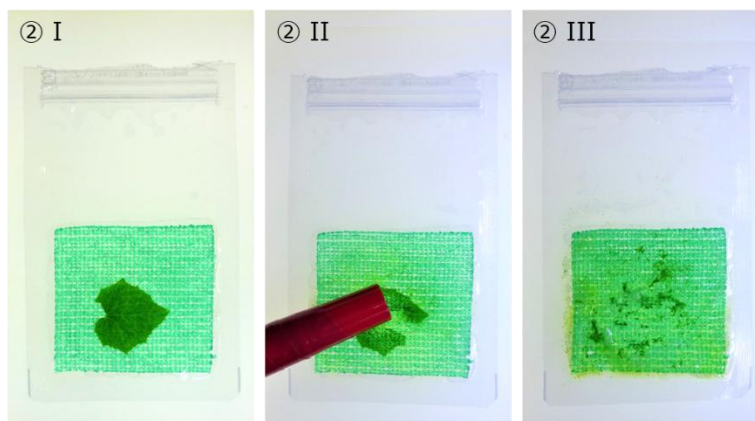
Wash your hands thoroughly and disinfect tools such as scissors before collecting samples. Use a separate set of tools for each plant. Do not reuse tools between plants. Tools contaminated with sap may spread mechanically transmissible plant viruses and may also affect the test result. Take approximately 2 cm² (about 60 mg) from a part of a true leaf showing symptoms such as chlorosis, necrotic spots, or yellowing, and place it in the extraction bag.

***1 Completely yellowed leaves are not suitable as test samples, as they contain low levels of virus.**

***2 Using too much plant tissue may interfere with the test and lead to incorrect results. Use an appropriate amount of leaf tissue for each test.**

② Sample preparation

- I. Place the sample in the extraction bag so that it is in contact with the mesh, expel the air from the bag, and close the zipper securely.
- II. Grind the sample through the bag using the end of a capped marker pen or a similar blunt object.
- III. Once no intact tissue fragments remain, knead the bag by hand to homogenize the sample extract.

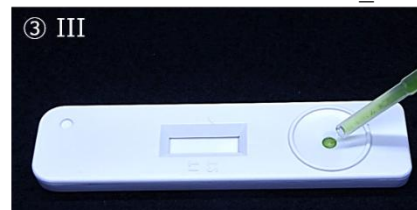


Assay

③ Applying the sample extract

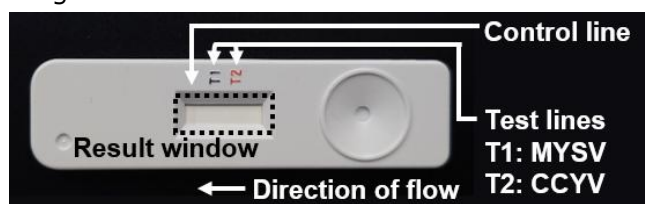
- I. Take out a test strip immediately before use and place it on a flat surface such as a table.

- II. Using the dropper pipette provided, draw up the sample extract from the extraction bag, taking care not to draw up any bubbles.
- III. Slowly apply 6 drops of the sample extract to the sample application area of the test strip (the doughnut-shaped area).



④ Reading the result

Read the result 15 to 30 minutes after applying the sample extract, according to the criteria below. The result window has three line positions: the control line, test line T1 (MYSV), and test line T2 (CCYV). Only red-violet lines are read as result lines. A green line from plant pigments may appear at the T1 or T2 position, particularly when too much sample has been used; do not read this as a positive result. If it makes the result difficult to interpret, repeat the test with a new test strip using less tissue.



Result window Control line / T1 / T2	Lines that appear (red-violet)	MYSV	CCYV
	Control line, T1, and T2	Positive	Positive
	Control line and T1	Positive	Negative
	Control line and T2	Negative	Positive
	Control line only	Negative	Negative
	The control line does not appear, whether or not the T1 or T2 lines appear	Retest required	

*If a retest is required, repeat the test with a new test strip.

Precautions for Use and Handling

- (1) Avoid contact of the kit reagents with skin, hair, and clothing.
- (2) If a reagent enters the eyes or mouth, rinse immediately with plenty of tap water and seek medical attention.
- (3) Each dropper pipette is for single use only. Do not reuse it for another sample.
- (4) Store the kit in accordance with the storage conditions given below, away from direct sunlight and heat sources.
- (5) If the result window of a test strip becomes wet before use, the result cannot be read correctly. Discard the strip and repeat the test with a new one.
- (6) Dispose of used materials in accordance with local regulations.
- (7) NIPPON CORPORATION and FASMAC Co., Ltd. accept no liability for any loss or damage caused directly or indirectly by this kit.

Storage Conditions and Expiration Date

Storage Conditions: Avoid high temperature and high humidity. Store the kit refrigerated at 4–10°C.

Expiration Date: Printed on the outer packaging.

- (1) After opening, expel as much air as possible from the resealable foil pouch, close the zipper firmly, and store the pouch refrigerated.
- (2) Do not use a kit after its expiry date.

Contact

Distributor

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Manufacturer

NIPPON CORPORATION

*This kit is the result of a collaborative project with Ibaraki Agricultural Center.