Agdia, Inc.
52642 County Road 1
Elkhart, IN 46514
Phone: 574-264-2014 or toll-free 800-622-4342
Fax: 574-264-2153
Web: www.agdia.com
Email: info@agdia.com

Leading the way to healthy crops.

USER GUIDE: MDMV ImmunoStrip® (Product Number 18000)

KIT INFORMATION

Intended Use
The MDMV ImmunoStrip is a rapid means of screening corn, sorghum, and Johnsongrass for the presence of *Maize dwarf mosaic virus* in a single infected leaf extracted in sample buffer at 1:20 ratio. For optimum performance it is recommended to use SEB9 extraction buffer. The test also performs well with SEB1 buffer. Do not use any other sample buffer.

Storage of Kit
ImmunoStrips should be stored refrigerated (4 °C) between uses and tightly sealed in the desiccated container at all times.

Kit contents should be warmed to room temperature prior to use.

ImmunoStrip Kit (ISK) Includes
- ImmunoStrips
- SEB9 sample extraction bags
- User guide

ImmunoStrips (STX) purchased separately do not include buffer filled mesh bags.

What's required to perform the assay?
- Scissors, knife or razor blade
- SEB9 sample extraction buffer
- Sample extraction device (Agdia sample extraction bags are recommended)
- Letter holder or other device to hold sample extraction bags.
- **SEB1 can be used as an alternate buffer.*

PERFORMING THE ASSAY (*Special Attention Required)

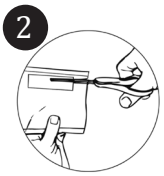
Prepare Sample

1

Collect a sample section that is approximately ***1 inch square** in size. It is recommended that samples be taken from areas of the plant that exhibit symptoms of disease.

Note: It is recommended that you use a clean cutting tool for each sample. If you must reuse the cutting tool, first wipe off the cutting edge and disinfect in a 10% bleach solution before cutting into a new sample.

2



Cut open the sample extraction bag along the top of the label. Be careful not to spill the buffer.

***SEB9** Buffer is supplied in the kit; however SEB1 can also be used.

3

Insert the sample between the mesh linings near the bottom of the sample extraction bag.

4

Extract the sample by rubbing it gently between the mesh linings with a blunt object such as a pen or permanent marker.

Depending on the sample type, the color of the solution will turn a light brown or green color once the sample is adequately extracted.

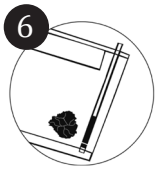
Perform Assay

5

Insert the ImmunoStrip into the channel portion (no mesh) of the buffer filled bag.

***Be sure to insert the "sample" end of the strip no more than ¼" or to the white line on the ImmunoStrip label.**

6



Allow the ImmunoStrip test to remain in the sample extract for 30 minutes. Positive results may be visible in as little as 5 minutes. Lower titer samples may take up to 30 minutes.

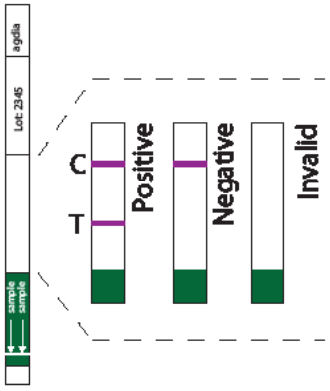
7 **Interpret Results**

Remove test strip from extract and interpret results (see illustration).

If only the control line (C) is visible, this indicates a negative result.

If the test line (T) is also present at any intensity of pink / purple, this indicates a positive** result.

If no lines are present, the test is invalid (see troubleshooting).



SAFETY

ImmunoStrips and sample extraction buffer are non-hazardous.

TROUBLESHOOTING

Control line did not develop.	This situation is generally caused by over-submergence of the test strip in the sample extract. Results in this situation should be considered invalid and the test should be repeated.
Test runs very slow or not at all.	This can be caused by using too much tissue for extraction. Repeat the test using less tissue or by further diluting your previous sample extract 1:10 with SEB9. If the above is not the case, make sure the test components were warmed to room temperature before use and are within their expiration date.
Test has a green or pigmented test line.	This can be caused by using too much tissue for extraction. Repeat the test using less tissue or by further diluting your previous sample extract 1:10 with SEB9. **In rare cases, the tissue type may cause a pigmented line. Green lines should not be considered a positive result. Red, orange, or purple fruits may cause what appears to be a positive test line. It is recommended that you contact Agdia before testing these types of samples.
Test and / or control line is weak.	Make sure the test is within its expiration date. If kit contents were left open too long, the strips could have absorbed moisture, which can affect test results. Be sure to always keep the ImmunoStrip vial tightly sealed between uses. The test line may be weak due to low pathogen titer in the sample.