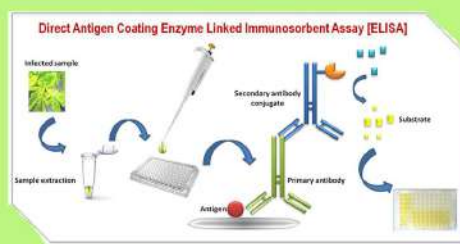




Dasheen mosaic virus Diagnostic Kit



DAC - ELISA KIT

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DESCRIPTION

Among the various diseases affecting Elephant foot yam, the mosaic disease caused by *Dasheen mosaic virus* (DsMV) is one of the most devastating diseases. DsMV is a single stranded positive sense RNA virus belonging to *Potyviridae* family. The Direct Antigen Coating Enzyme Linked Immunosorbent Assay [DAC – ELISA] kit developed by ICAR – CTCRI detects the presence of viral protein through interaction between the viral coat protein antigens with the specific polyclonal anti-bodies raised against the viral antigen followed by binding of a secondary enzyme-linked antibody complementary to the primary antibody. Finally, addition of substrate and the detection of presence or absence of virus based on color change. A color change to yellow indicates that the test samples possess the viral antigen. No color change indicates absence of viral antigen in test sample. The kit has been well standardized for efficient detection of DsMV from field samples.

ADVANTAGES

- Simple procedure
- High sensitivity
- High efficiency
- Safe and eco-friendly
- Cost-effective assay

KIT COMPONENTS

ELISA plate, Extraction buffer, Blocking solution, Wash buffer, Primary antibody, Secondary Antibody, Substrate, Substrate buffer, User Manual

ASSAY PROCEDURE (refer user manual)

- Extract samples in extraction buffer (provided)
- To ELISA plate add 200 μ l aliquots of control and test samples, incubate at 37°C for 3 hours
- Discard the solution and wash plate 3 times with Wash buffer (provided)
- Add 200 μ l of blocking solution, incubate at 37°C for 30 min
- Discard solution, wash 3 times, add 200 μ l of primary antibody to each well
Incubate overnight at 4°C
- Discard the solution, wash 3 times, add 200 μ l of secondary antibody, incubate for 2 hours at 37°C
- Discard solution, wash 3 times, add 200 μ l of freshly prepared substrate to each well
- Incubate for 30 min at room temperature in dark
- Assess results by visual inspection or by taking Spectrophotometric reading

RESULT INTERPRETATION (Refer user manual)

Positive result: A color change to yellow indicates that the test samples possess the viral antigen

Negative result: No color change indicates the absence of viral antigen in test sample.

Result can also be interpreted based on spectrophotometric reading (refer user manual)