

Tomato Brown Rugose Fruit Virus (ToBRFV)



Intended use

The rapid test "ToBRFV AgriStrip^{cassette}" enables to detect on-site the presence of ToBRFV, also known as "Jordan virus", in suspicious samples within minutes (Fig. 4*). ToBRFV belongs to the genus Tobamovirus and causes various symptoms such as yellow or brown, wrinkled spots on fruit, narrowing and mosaic discoloration of leaves, and deformed or irregularly ripened fruit. ToBRFV host plants are mainly tomatoes (*Solanum lycopersicum*) and peppers (*Capsicum* spp.). ToBRFV is on the EPPO-A2 list of pests, recommended for regulation as a quarantine pest since September 2020.

Specificity and sensitivity

The polyclonal antibodies used for the rapid test "ToBRFV AgriStrip^{cassette}" were developed against a ToBRFV isolate from tomato (Germany). All isolates of ToBRFV tested so far can be detected (isolates from locations in Germany, Italy, the Netherlands, Switzerland, and Israel). The rapid test is suitable for detecting ToBRFV in plant leaves and fruits and is not recommended for seeds. The ideal dilution of the samples is between 1:40 and 1:80. Slight cross-reactions with the Tobamoviruses ToMV and TMV have been observed. Cross-reactivity with other Tobamoviruses cannot be excluded. No cross-reactivity was observed with the Tobamoviruses CGMMV and PMMoV. We recommend confirming positive results with a more sensitive assay such as the BIOREBA qPCR ToBRFV set (Art. No. 889200, 889600). The product is based on antibodies developed by the Leibniz Institute DSMZ GmbH, Braunschweig, Germany.

Instructions for use

1. Remove the dropper tip from the provided homogenization tube and put about 0.2 g of the leaf or fruit (corresponding to about the size of a 1-Euro coin) into the 8 ml of extraction buffer A (Fig. 1*).
2. Crush and homogenize the plant tissue by shaking the tube thoroughly by hand (20-30 seconds) until the plant sap is well mixed with the extraction buffer and re-insert the dropper tip into the tube (Fig. 2*).
3. Squeeze 4 drops of the extract onto the sample spot of the test cassette (Fig. 3*).
4. Observe the color development of the lines, which reach their maximum after 15-20 minutes, and perform the evaluation.

*Pictures refer to the document «Technical Information – AgriStrip^{cassette}»

Ordering Information

Product	Art. Nr.	Assays
ToBRFV AgriStrip ^{cassette} kit	152881NF	5

Feedback

Quality and customer satisfaction are very important to us. Your feedback helps us to improve our products. Please have a minute to scan the QR code and send us your feedback:

