

## Agdia ImmunoStrip<sup>®</sup> Product now Available for Detection of Angelonia Flower Break Virus (AnFBV)

Agdia, Inc. of Elkhart, IN is happy to announce the commercial release of a rapid diagnostic for the detection of Angelonia flower break virus on their popular ImmunoStrip® platform.

Symptomology of Angelonia flower break virus (AnFBV, Alphacarmovirus) was first observed in 2005 on Angelonia angustifolia plants grown in Germany, Israel and the U.S. Symptoms included leaf mottling, flower break and stunting, leading researchers to suspect viral etiology. Subsequent sequence analysis of plant products revealed the presence of an uncharacterized virus, most closely related to Pelargonium flower break virus (PFVB) and Carnation mottle virus (CarMV), both in the genus Carmovirus. Following the completion of Koch's postulates, the new virus was named Angelonia flower break virus. Initially, the German isolate was referred to as Angelonia flower mottle virus, which is now recognized as a synonym for AnFBV. In 2015, the genus Carmovirus was divided into three discrete genera:



Figure 1: Agdia's new Angelonia flower break virus ImmunoStrip®

Alphacarmovirus, Betacarmovirus and Gammacarmovirus.

Since its characterization, the natural host list for AnFBV has grown to include cultivars within the genera Nemesia, Phlox and Verbena, in addition to Angelonia. Angelonia flower break virus can be spread between production facilities via the movement of infected propagative materials. Thereafter, AnFBV is spread mechanically via the movement of viruliferous plant sap on hands and implements. No arthropod vectors are known to transmit AnFBV, and seed transmission is believed to be inconsequential to epidemiology. The full extent of AnFBV infections within the ornamental industry is unclear, and many believe it is more widespread than initially suspected.

Agdia states their new ImmunoStrip® for detection of AnFBV was tested against a broad exclusivity panel of potential cross-reactors, including Alfalfa mosaic virus, Alternanthera mosaic virus, Calibrachoa mottle virus, Carnation mottle virus, Impatiens necrotic spot virus, Nemesia ring necrosis virus, Pelargonium flower break virus, Tobacco mosaic virus and Tomato spotted wilt virus, with no cross-reactions observed. Furthermore, the product will detect the original AnFBV isolates from Germany, Israel and the U.S., in addition to a discrete isolate from California. Agdia's new ImmunoStrip® can be used to test leaf and petiole tissue. Please see Agdia's product page for the AnFBV ImmunoStrip<sup>®</sup> for a comprehensive validation report.

Agdia's ImmunoStrip<sup>®</sup> for detection of AnFBV is sold in kits of five and 25 strips, and kits include everything necessary to perform a test. Agdia provides a one-year warranty on all purchased products. A diagnostic assay for the detection of this pathogen is also available in an enzyme linked immunosorbent assay (ELISA) format. For more information on these products, in addition to Agdia's full catalog of pathogen detection products, visit the company's website at www.agdia.com, e-mail info@agdia.com, phone 1-574-264-2615 (toll-free 800-622-4342) or fax 1-574-264-2153.

ImmunoStrip<sup>®</sup> is a registered trademark of Agdia, Inc.