

User Guide AgriStrip

Banana bunchy top virus (BBTV)

Intended use

This test is intended to detect Banana bunchy top virus (BBTV) in suspicious leaf samples. The BBTV AgriStrip recognizes BBTV isolates from Australia, South Pacific, Africa, South-East Asia and Taiwan. The test shows high specificity, with no cross-reactivity to Banana bract mosaic virus (BBRMV), Banana mild mosaic virus (BanMMV), Cucumber mosaic virus (CMV), Sugarcane mosaic virus (SCMV) and Banana streak viruses.

AgriStrip is based on lateral-flow immunochromatography and intended to screen suspicious plant samples for a specific pathogen on-site. Lines start developing after 1-2 minutes and reach maximum intensity after 10-15 minutes. Dried strips can be kept as a permanent record.

Kit Storage

Store kit components at 2-8°C. Exposure to ambient temperature (10-30°C) during transport and use in the field, does not affect the quality. Keep the container with the AgriStrips always hermetically closed. Absorbed moisture by the strips can lead to poor results or even complete failure of the test. Before use, allow all kit components to warm to room temperature (18-30 °C).

Test Procedure

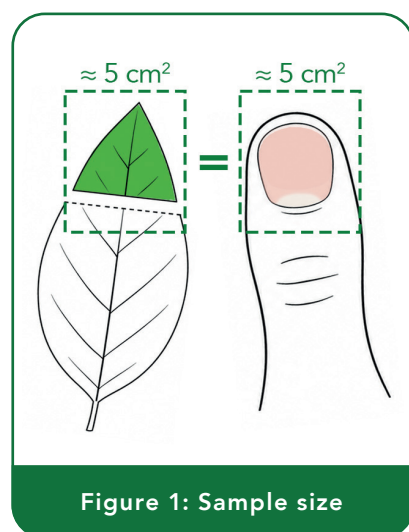


Figure 1: Sample size

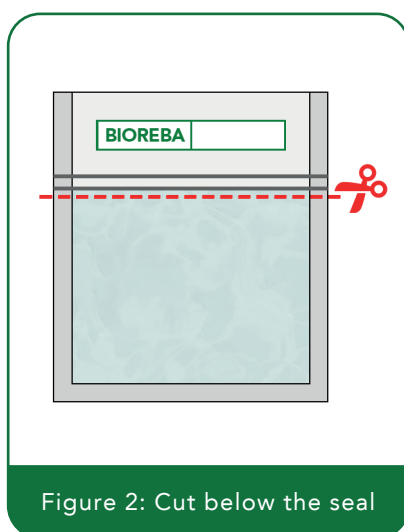


Figure 2: Cut below the seal

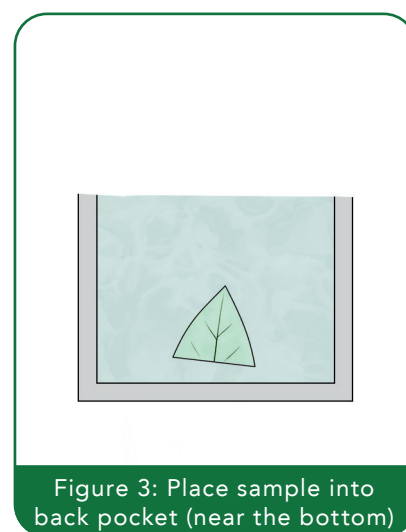


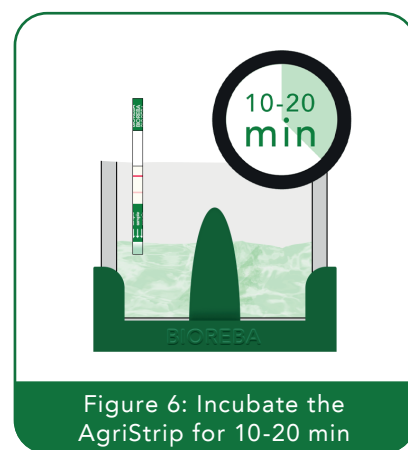
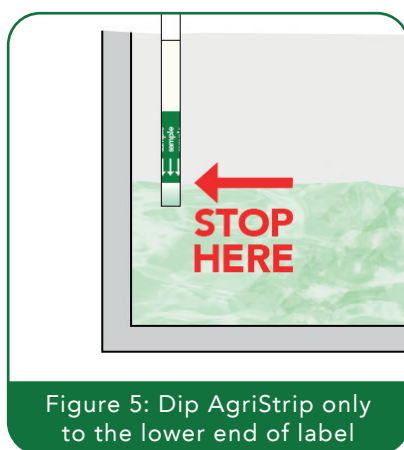
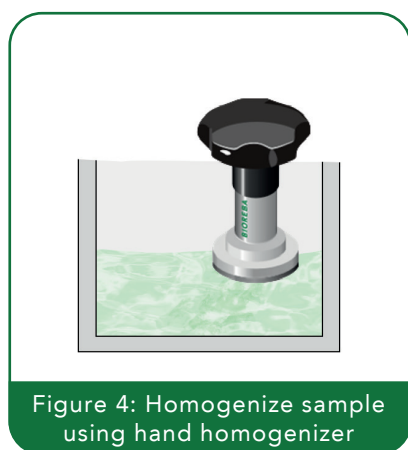
Figure 3: Place sample into back pocket (near the bottom)

1. Prepare the Sample

- Take a BIORÉBA extraction bag that already contains **4 mL of Extraction buffer A**. Make sure to use the provided buffer for the extraction.
- Take a small sample of **symptomatic plant tissue**.
 - For the **optimal dilution of 1:10 - 1:20**, use **0.2 - 0.4 g** of midrib tissue from a young leaf - 0.2 g is about **5 cm²** which is about the size of an adult's thumbnail (Figure 1).
Note: very thick or dense tissue can weigh more.
- Cut the bag open **below the seal** (Figure 2). Be careful not to spill any liquid.
- Put the plant sample into the **back pocket** of the extraction bag, near the bottom. (Figure 3)
- Homogenize (crush) the tissue using a handheld homogenizer on a flat surface until you get a liquid sample extract. (Figure 4)

2. Perform the Test

- Take one AgriStrip out of its container by holding the end with the **BIOREBA logo**.
(**Note:** Please do **not** remove the protective cover.)
- Put the **sample end** of the AgriStrip into the **front pocket** of the bag that contains the sample extract
 - Important:** Only dip the strip **up to the lower end of the label**. (Figure 5)
 - Make sure the sides of the strip do **not** touch the sample liquid or foam.
- Place the bag upright (e.g., in a BIOREBA BIOrack).
- Let the strip stay in the sample for **10–20 minutes**. (Figure 6)
 - Positive results may appear as early as **5 minutes**.
 - Samples with low pathogen levels may need up to **20 minutes**.



3. Read the Results

- Take the AgriStrip out of the extraction bag and read it immediately.

