

Measure the Primary Cause of Bunch Rot with a New, Rapid Test

BECAUSE OF THE POTENTIAL PROBLEMS associated with Botrytis infection, Vinquiry now has a new test available to help detect and quantify Botrytis in juice. The EnviroLogix QuickStix Kit provides semi-quantitative analysis of *Botrytis cinerea*—enabling vineyards and wineries to make better decisions on harvesting, segregation and processing.

An immunoassay, the test works on the immunological principle that specific antigens will stimulate very unique immune responses. The proteins produced by the immune response, called antibodies, can be used to signal the presence of a target compound in a sample. The test kit uses a Botrytis monoclonal antibody that recognizes a specific Botrytis antigen in grape juice from infected berries. In its lateral flow (or immunostrip) format, the device has been used by researchers in California and New Zealand to detect and quantify the Botrytis fungus in juice from immature and harvested berries.

Frances M. Dewey, Ph.D., of the University of Oxford, England, created the measurement scale employed by the QuickStix testing system. Developed during her work with the California Wine Grape Inspection Advisory Board, the “Dewey I-W Standard” measures Botrytis levels on the basis of incidence or weight. The scale is derived from combining 20 half-turgid Botrytis-infected berries with 80 uninfected berries, giving a 20 percent incidence standard. This juice is then diluted further into juice from uninfected berries to achieve a measurement range. Percent by weight is obtained by multiplying the incidence level by 0.333, as a half-turgid Botrytis-infected berry weighs, on average, one-third that of an uninfected berry.

Vinquiry now has this Envirologix Botrytis Assessment available to winemakers for juice samples. The Botrytis Risk Assessment Test requires 5mL of juice and is available for \$25 per sample. Contact Vinquiry’s lab at 707-838-6312 for more information.