

## Pest Identification

The Plant Protection Research Unit, within the Ministry of Agriculture & Fisheries, is responsible for pest identification. Pest identification, of especially invasive species, is a major component of the plant threat eradication programme. Research and diagnostics facilitate the development of effective solutions to critical pest problems facing the agriculture industry. The findings from the Unit's research efforts are included in the management and quarantine plans of the Ministry.

Identification is conducted by three laboratories within the Plant Protection Research Unit, namely: Entomology (insects and mites), Plant Pathology (fungi bacteria and viruses) and Nematology (nematodes).

Pest management is improved by networking among the Plant Protection Research Unit and external bodies such as the University of the West Indies and CARINET (Caribbean Network for Biosystematics), a Trinidad & Tobago-based organization that has connections to institutions with taxonomic expertise in pest identification.

Farmers and citizens are encouraged to assist in the identification process by providing samples of infected plants and suspected pests to the Plant Protection unit; however care must be taken in submitting the samples. The relevant diagnostic laboratory then performs tissue testing on specimens, microscopic examination of diseased plant material and culture of suspected disease-causing organisms to verify the causes of the plant disorders.

Distance diagnosis through digital imaging is also conducted by the Plant Protection Research Unit. Digital photographs accepted from farmers or citizens must meet certain requirements for submission for them to be useful in identifying pests. It is anticipated that digital imaging will improve the response time needed to coordinate eradication action plans. On the other hand, the format only provides tentative identification of pests which may be sufficient for the purpose of providing recommendations to alleviate the pest problem. However, for final confirmation the actual specimen will be required, especially if species identification is required.

Contact may be made via [ppu@mcaf.gov.jm](mailto:ppu@mcaf.gov.jm).