

## Abstract

Guava is one of the most widely grown plants in the tropics; however, it is affected by many fruit rot diseases. Fruit diseases decrease the marketability of fresh fruit and fruit for processing. A survey of scab disease was conducted at the USDA/ARS Tropical Plant Genetic Resource Management Unit in Hilo, HI, where more than 50 accessions of guava are grown. Symptoms observed were gray/light brown lesions surrounded by dark brown borders on leaves and brown, raised, corky, necrotic lesions on the exocarp of fruit which progressed as the fruits matured. Seventeen isolates from infected fruit, six isolates from lesions on leaves, and nine isolates from additional crops surrounding the guava trees were collected. The main fungi consistently isolated from symptomatic leaves and fruit were *Pestalotiopsis* spp. Morphology, colony characteristics, and pathogenicity of the isolates were examined and potential sources of host resistance were identified for germplasm characterization studies. Molecular methods were used to identify four *Pestalotiopsis* taxa (*P. clavispora*, *P. microspora*, *P. sp.* GJ-1, and *P. disseminata*) on guava in Hawaii. To our knowledge, this is the first report of traditional and molecular methods of identification and characterization being used for fungal pathogens of guava in Hawaii.