

Peer Review Plan

Date: 1/31/2012

Source Center: U.S. Geological Survey (USGS)
Pacific Island Ecosystems Research Center
677 Ala Moana Blvd., Suite 615
Honolulu, HI 96813

Title: Economic Analysis of the Proposed Rule to Prevent Arrival of New Genetic Strains of the Rust Fungus *Puccinia psidii* in Hawai'i.

Subject and Purpose: This report discusses the potential economic impact on the state's florist, nursery, landscaping, and forest plantation industries of a proposed rule that would ban the import of non-seed Myrtaceae plant material and require a one-year quarantine of seeds. Since its first documented introduction to Hawai'i in 2005, the rust fungus *P. psidii* has already severely damaged the *Syzygium jambos* (Indian rose apple) and the federally-endangered *Eugenia koolauensis* (nioi). Fortunately, the particular strain has yet to cause serious damage to 'ohi'a, which comprises roughly 80 percent of the state's native forests and covers 400,000 ha. Although the rust has affected less than 5 percent of Hawai'i's 'ohi'a trees thus far, the introduction of more virulent strains and the genetic evolution of the current strain are still possible. Since the primary pathway of introduction is Myrtaceae plant material imported from outside the state, potential damage to 'ohi'a can be minimized by regulating those high-risk imports.

USGS scientist Lloyd Loope is coauthor of this non-USGS publication that was prepared by Dr. Kim Burnett and colleagues of the University of Hawaii Economic Research Organization, with financial support from the U.S. Fish and Wildlife Service via the USGS Science Support Program. The product was previously released as a PCSU Technical Report #177 (<http://manoa.hawaii.edu/hpicesu/techr/177/default.htm>) and is now being submitted to an outside peer-reviewed journal for publication.

Impact of Dissemination: This information product is considered by the USGS to be Influential Scientific Information.

Timing of Review (Including Deferrals): February – April 2012. Deferrals are not anticipated.

Manner of Review, Selection of Reviewers, and Nomination Process: USGS has already gone through the process of obtaining and reconciling USGS reviews for the previously released PCSU Technical Report #177. The manuscript will now be submitted to a journal, the suggestions of peer reviewers selected by the journal will be responded to and reconciled, and the manuscript re-evaluated for USGS approval.

Expected Number of Reviewers: Anticipate 3 or fewer additional reviewers.

Requisite Expertise: Invasive species biology, high-island ecology, natural resource valuation economics.

Opportunity for Public Comment: No opportunity for public comment is formally incorporated for this product.

Agency Contact: peer_review_agenda@usgs.gov.