State of Hawai‘i
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawai‘i 96813

August 25, 2009

Chairperson and Members
Natural Area Reserves System Commission
State of Hawai‘i
Honolulu, Hawai‘i

NARS Commission Members:

SUBJECT: DOMINANT NATIVE PLANT LIST FOR QUARANTINE REGULATORY ACTIONS.

BACKGROUND:
A LETTER DATED April 14, 2009 was sent to the Chairperson of the Board Land and Natural Resources by the Commission, advising her of the need for the Hawai‘i Department of Agriculture to make rule changes to offer special quarantine protection for dominant native plant genera.

A list of 16 plants passed out at the May 26, 2009 Commission Meeting included Eucalyptus (not native), Deschampsia (all grasses are already regulated for sugarcane production) and Cheirodendron `olapa). After review with numerous specialists, it was generally agreed to drop those from the list to keep it to a manageable size for quarantine action. Rob Hauff, Forest Health Coordinator for the Division of Forestry and Wildlife (DOFAW), has already submitted to the US Department of Agriculture – Animal and Plant Health Inspection Services (USDA-APHIS) the same list of 13 genera. APHIS is now soliciting input from states for genera of plants (for propagation) to regulate under the proposed Not Authorized Pending Pest Risk Assessment rule.

The Commission being asked to officially recognize the following 13 genera as needing special Federal, as well as State quarantine protection:

- **Metrosideros** (‘ohi’a): state’s most important and dominant native tree for watershed and native ecosystem and cultural values
- **Acacia** (koa): important for natural as well as cultural values
- **Cibotium** (hāpu‘u): native tree ferns are important founders (many native plants take root on their trunks
- **Sophora** (mamane): important host plant for numerous forest birds and invertebrates
- **Myoporum** (naio): important native shrub/tree, under threat from introduced pest (thrips)
- **Dodonaea** (‘a‘ali‘i): important host plant for many native invertebrates; culturally significant
- **Erythrina** (williwilli): considered to be most important dry forest dominant tree, under threat form introduced gall wasp; culturally significant
• *Vaccinium* (‘ohelo): host plant for many invertebrates, provides important forage for many endangered forest birds; as *kinolau* of Pele, is considered to be one of the most significant native plants

• *Leptocoryphyla* (pukiawe) formerly in the genus *Styphelia*: host for many native invertebrates, provides important forage for native birds; high cultural values associated with this plant; the only member of this family in the state

• *Diospyros* (laimo): native persimmon, very important dry to mesic forest component; culturally significant

• *Pandanus* (hala): both native and Polynesian-introduced, important component of lowland forests; culturally significant; under attack by introduced scale insects.

• *Scaevola* (naupaka): one of the most important species radiations, the 13 known species here are more any other island group (research by Dr. Dianella Howarth); important vegetation component from coast to mountain top; culturally significant

• *Dicranopteris* (uluhe): this fern may be cursed by those trying to hike through their dense stands, however they serve to hold large areas at bay from invading plants; however under attack by introduced two spotted leaf hopper

Federal rules would protect the dominants from foreign pest threats while State rules would protect them from pests that are accidentally imported form other states.

**STAFF ANALYSIS:**
The past few years have seen a rise in pests that pose a threat to the native forest, and any decline of these forests would profoundly affect the plant communities/ecosystems and the assemblage of other plant and animal species that depend on them for survival. Regulating at the generic level is important; since pathogens, such as *Puccinia psidii* (guava rust), have the demonstrated ability to attack several genera of the Myrtle family (*Myrtaceae*, which includes many important native plants, but also highly invasive non-native species such as strawberry guava).

While there have been discussions about invaders at past Commission Meetings, it is becoming clear that a concerted effort needs to be initiated to protect our dominant native plant genera; and this is seen as an important step. Commission and staff members are willing and able to provide input and assistance into the rulemaking process that must come from the Hawai‘i Department of Agriculture (HDOA), and they in turn should be asked to work with the United States Department of Agriculture (USDA) to avoid federal pre-emption of any new State plant import rules that are stricter than theirs.

**RECOMMENDATION:**
That the NARS Commission approve and recommend the thirteen listed dominant genera, and that a letter be sent through the Board of Land and Natural Resources, or its authorized representative, to the Department of Agriculture and the Board of Agriculture, to request quarantine regulatory actions.

Respectfully submitted,

[Signature]
Betsy H. Gagne, Executive Secretary
NARS Commission