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[\[Ecological Conservation\] Conservation Plan Inaugurated for Endangered Taiwan Sphaeropteris Lepifera](#)[\[Ecological Conservation\] Conservation Plan Inaugurated for Endangered Taiwan Sphaeropteris Lepifera \(Chinese Version\)](#)

The Liberty Times (2011/01/23) Sphaeropteris lepifera (brush barrel tree), Alsophila spinulosa (Taiwan tree fern) and Alsophila podophylla are CITES Appendices II enlisted valuable tree fern species (CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as the Washington Convention). During the past years, a mass extinction have been noticed; the whole species of them seem to face serious endangerment. In order to conserve the previous species, Taiwan Forestry Research Institute, Council of Agriculture, decides to enable a conservation program, entitled "Noah's Ark", to establish seed banks for Sphaeropteris lepifera and the other endangered plants.

Brush barrel tree is a primitive fern species, whose ancestors had been existing as the main role in the Carboniferous forest about three hundred million years ago. Such a plant is commonly recognized to be the most adaptable plants with strong climate change resistance. However, since six years ago the brush barrel tree epidemics has been observed and noticed in North Taiwan and the situation kept worsening. In sum, above seventy percent of brush barrel trees in North Taiwan have been infected with sclerotinia. The sick plant is observed to wither from the outer layers of the leaves at the beginning and then to the inner sprouts, and the plant is announced dead when the innermost top core gets sere while the stem core become dark brown. Once the plant is infected, it will die after two months.

According to the statistics collected by Taiwan Forestry Research Institute, beside of the three CITES A-II species, the endangered species also include other Cyatheaceae subspecies such as Alsophila denticulata Bak., Alsophila metteniana Hance, etc. Among them, the epidemic situation of Sphaeropteris lepifera is the most serious which has been covered the whole island and Lanyu (Orchid Island).

Director-General of Forestry Bureau, Council of Agriculture, Jen-Teh YEN and Director-General of Taiwan Forestry Research Institute Yue-hsing Star HUANG both believed that the epidemic situation has been very severe. YEN promised to make the brush barrel tree epidemics the center objectives of the bureau's 2011 tasks and to distribute a budget of 25 million NT dollars for relevant researches and surveys. HUANG has earmarked a special fund for confronting the sclerotinia epidemics.

Besides, in order to prevent from the extinction of the species of brush barrel tree, a conservation program entitled "Noah's Ark" has been enabled respectively in Yangming Mountain area and Pingtung County. Dr. Cecilia Koo Botanic Conservation Center in Pingtung has begun the experimental inoculation of five hundred brush barrel tree seedlings. Tianrui Farm (trans. temp.) in Yangming Mountain area has kept one thousand seedlings for field observation and experiments. Because the epidemic area covers the whole island, the government still has to find the methods to select non-infected seed provenances.

Relevant Historical Message:

[\[Ecological Conservation\] Taiwan Sphaeropteris Lepifera Faces Catastrophe 2009/05/21](#)

Further Information:

[The Liberty Times 2011/01/23](#) (Chinese)

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[National Science Council International Cooperation Sci-Tech Newsbrief](#)

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