

Environmental weeds in the native forests of La Réunion Island: prospects for biocontrol

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The native vegetation of La Réunion Island has been greatly threatened by the presence of harmful environmental weeds. Ever since the first settlement in the 17th century, more than one thousand species of exotic plants have been introduced to the island. The first attempts to reduce the spread of *Rubus alceifolius* (Rosaceae), a bramble native to south-east Asia, were conducted in the 1950s. More than ten years of chemical control have been undertaken in nature reserves and in plantation forests. The new policy of the Office National des Forêts (ONF) is to integrate chemical and biological control. A research programme, initiated by ONF, is underway to study the two major environmental weeds of La Réunion, *R. alceifolius* and *Ligustrum robustum* subsp. *walkeri* (Oleaceae), and to investigate a programme of biological control. Both weed species seem to have potential as targets for biological control. The following prospective agents are known from the literature: on *R. alceifolius* (giant bramble), *Phaedon fulvescens* (Coleoptera: Chrysomelidae) and the fungal pathogens (Uredinales) *Kuehneola* sp., *Hamaspora* sp., *Phragmidium* (*Phragmotelium*) sp. and *Gerwasia rubi* (no host-specificity tests have been done on these species), and *Hamaspora acutissima*, *H. longissima* and *Kuehneola uredini* which may prove to be important because they appear to be specific; and on *L. robustum* (privet), there are many phytophagous insects and several pathogens that are known from ornamental *Ligustrum* species, but no specific natural enemies have been identified yet.

Biological control of forest weeds in Hawaii

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Research on the biological control of weeds of native Hawaiian forests continues, supported by several agencies but without a clear mandate, a matter that could herald its demise. Five species are at various stages of management: control agents against *Passiflora mollissima* (Passifloraceae) and *Myrica faya* (Myricaceae) have been released; five species have been identified as potential agents against *Psidium cattleianum* (Myrtaceae) and are undergoing basic studies and host-screening evaluations; exploratory research for agents that will attack *Miconia calvescens* and *Tibouchina herbacea* (both Melastomataceae) are underway; and, *Rubus ellipticus* (Rosaceae) is undergoing initial studies at the Institute of Plant Protection, Beijing. One high-priority target species, *Pennisetum setaceum* (Poaceae), has been discussed, but a small group of dissenting subsistence ranchers are opposing an otherwise overwhelming majority in support of the research. Initial efforts against *Batis maritima* (Bataceae), a halophyte that smothers the feeding ground of an endangered stilt, were terminated because only one year's funding was guaranteed. Down-sizing of government at both the state and federal level as well as associated budget cuts suggest that this programme will not continue for long. Funding from other sources is highly unlikely even though most of the above species were introduced by the horticulture and agriculture industries.