

# Managing alien plant invasions in French Polynesia: a first step

In a first important step for French Polynesia's biological invasion management program, 13 alien plant species considered to be major invasive plants in native habitats of the tropical oceanic islands of French Polynesia have been legally declared "species that threaten biodiversity" (decree 244 CM adopted by the Government of French Polynesia on February 12, 1998). These species are: *Acacia farnesiana* (Leguminosae), a thorny shrub colonizing dry habitats; *Ardisia elliptica* (Myrsinaceae), a small tree forming dense covers in wet lowland areas; *Cecropia peltata* (Cecropiaceae), a fast-growing pioneer tree in forest gaps and open areas; *Lantana camara* (Verbenaceae), a thorny shrub forming impenetrable thickets in dry and mesic habitats; *Leucaena leucocephala* (Leguminosae), a medium-sized tree forming dense stands in dry and mesic habitats; *Melinis minutiflora* (Graminae), a mat grass forming dense colonies in mesic and wet habitats of middle and high elevation; *Miconia calvescens* (Melastomataceae), a tree already declared a "noxious species" in French Polynesia in 1990, which forms densely shaded monotypic stands in mesic and wet habitats - including cloud-forests - and causes the extirpation of endemic plant species; *Psidium cattleianum* (Myrtaceae), a medium-sized tree forming dense thickets in mesic and wet habitats; *Rubus rosifolius*, a prickly shrub invading the understory of native forests, spreading up to the highest summit of Tahiti (2,241 m); *Spathodea campanulata* (Bignoniaceae), a large tree forming dense stands in mesic habitats; *Tecoma stans* (Bignoniaceae), a small tree forming dense thickets in mesic and wet habitats; and *Syzygium cumini* and *Syzygium jambos* (Myrtaceae)—both trees forming dense cover, and shading out all the other species in mesic and wet habitats. Most of these alien plant species are known to be highly-invasive elsewhere in the tropics, especially on oceanic islands (e.g. Cooks, Hawaii, Fiji, Galapagos, Mascarenes, Pitcairn, Seychelles). The noxious *Mimosa invisa* (Leguminosae), a thorny shrub of recent introduction (1950s), and *Merremia peltata* (Convolvulaceae), a light-loving vine of aboriginal introduction, were not included in this list because they are considered as "weeds" sensu stricto, i.e. found exclusively in human-disturbed areas.

New importation of these 13 alien species into French Polynesia (all were introduced intentionally as ornamentals, or for other purposes), cultivation, and

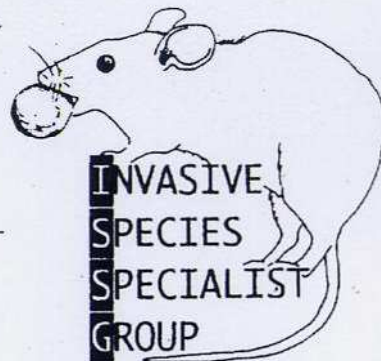
transportation between islands are all totally prohibited, and destruction is authorized. The distribution maps and management recommendations (major infestation sites and satellites, strategy and control methods) are currently undertaken by the Délégation à la Recherche (Research Department, Government of French Polynesia) in collaboration with the Service du Développement Rural (Agriculture Department), along with identification sheets of each species for local authorities and the public.

Although this new regulatory text will certainly have a low immediate impact in efficaciously controlling these dominant invasive plants (which are widespread and/or forming dense stands in some islands, especially in Tahiti, the largest island of French Polynesia), it will certainly have an important psychological impact and contribute to public awareness and information about the conservation impacts of plant invaders. For instance, the single African tulip tree (*Spathodea campanulata*) planted several years ago in the small island of Ua Huka (Marquesas archipelago) was destroyed shortly after the regulatory text was adopted.

The second major step of the biological invasion management program conducted in French Polynesia will be the early detection and control of potential/incipient invasive plant species (known to be highly-invasive elsewhere in the tropics) which are already present but not naturalized, or are still sparingly naturalized. For instance, there are only two Brazilian pepper trees (*Schinus terebinthifolius*, Anacardiaceae)—a tree known to be a serious plant pest in South Africa, Florida, Hawaii and the Mascarenes—growing as ornamental plants in Tahiti... This step seems far more difficult to achieve from both scientific and social/cultural points of view. How to predict which introduced species will effectively become invasive? How to convince local people and politicians to eradicate species which are considered as (beautiful and harmless) garden ornamentals ?

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# ALIENS



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## Changes at the Invasive Species Specialist Group

With the rise in global concerns over invasive species, the workload at the ISSG office has increased, and so we are now very glad to welcome a new staff member. Maj De Poorter will take over the running of the group, networking, policy development and editorship of *Aliens*. Maj has a PhD in ecology (Brussels, Belgium) and experience in networking, advocacy and policy, through more than a decade of NGO involvement in Antarctic issues. She is currently a member of IUCN's Antarctic Advisory Committee, and has most recently worked at the University of Auckland's Research Office, on external research funding. She should be contacted in future for any of the above issues, on [m.depoorter@auckland.ac.nz](mailto:m.depoorter@auckland.ac.nz).

Sarah Lowe continues full-time, but from January she will work on the group's commitment to the *Early Warning* section of the Global Invasive Species Programme (GISP)—including the two regional (Pacific and Indian Ocean) databases—as well as on the "World's Worst 100 Invasive Species" pilot database. (Her e-mail remains the same: [s.lowe@auckland.ac.nz](mailto:s.lowe@auckland.ac.nz)). I am sure that all recipients of *Aliens* will join me in thanking Sarah for her efforts over the past four years as editor of the newsletter, which has become a useful and widely-cited information source.

Also now, at the end of 1998, we would like to express our appreciation to all those people who have already put so much energy into the group in the past few years, and also to encourage all other *Aliens* readers to contact us with ideas and contributions for coming issues. Next year's work will include further refinement of the *Aliens* mailout, so that it goes to more people who will really use and appreciate it. In this regard we wish also to thank part-time staff member Tracey Lewis, who has worked extensively in the office and on *Aliens* distribution, and will be leaving for further study at the end of the year. She retains a strong interest in the group.

ISSG looks forward to being part of both the IUCN Invasive Species Initiative and the SCOPE Global Invasive Species Programme within the next few years.

Season's greetings,  
*Mick Clout*  
ISSG Chair

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