

Fatal beauty

In a forest not far from Nouméa, a small group of men advances silently, peering at the vegetation all around. They are looking for *Miconia*, a plant escaped from a garden. It would be an insignificant event were it not for the fact that the plant's escape is jeopardising the whole of New Caledonia's rainforest. *Miconia*, a native of South America which grows to a height of 10-15 metres, is perhaps the world's worst pest. In Tahiti, where it was introduced into the Papeari botanical garden in 1937, it has invaded two thirds of the natural forest, plunging the forest floor in deep shade beneath its thick foliage and threatening more than 70 plant species with extinction. In New Caledonia, it has so far invaded some twenty hectares. At that stage it is still possible to halt the tree's advance (even if selective herbicides have to be used!), provided there are monitoring arrangements to detect any hitherto undetected source of future spread.

This example illustrates the menace that ornamental plants can become; we tend to imagine they will stay put in the corner of the garden where we planted them. A research programme on this issue is under discussion. Many of these invasive species have been bred for easy propagation and their predisposition to produce an abundance of flowers – which also means an abundance of fruit.

Sooner or later, wind or a bird taking a fruit will transport seed to a natural area. A colony may grow, from which the invasion spreads. Once this is found it is often too late to halt the invasion because other pockets of the weed have appeared in the meantime. So that today, on some tropical islands there are as many, and sometimes more flowering plants of exotic origin than there are indigenous flowering species. Flora are becoming more uniform worldwide, not only on tropical islands.

Unfortunately, the history of biological invasion on tropical islands is endlessly repeated and the lessons of the past are rarely learned in time. *Miconia* is now spreading to Hawaii, Sri Lanka and Jamaica. But it is not the only invasive weed. The sweet, delicate scent of the ginger lily (*Hedychium coronarium*), for example, is poor compensation for the lack of regeneration now observed in the "bois de couleurs" forests of the Réunion highlands. *Adenanthera* whose lovely red seeds scatter the ground in the famous Vallée de Mai in the Seychelles, is also wreaking havoc.

On the east coast of Madagascar, the rolling hills are uniformly covered in small bushes with decorative leaves, a species of *Grevillea* from Australia. The list is almost endless. The apparent charm of these landscapes is equalled only by the ecological disaster masked by their fatal beauty.



• The tree *Acacia meansii* is a native of Australia, but has long been cultivated in Réunion and East Africa for its tannin-rich wood. It has now invaded more than 5,000 hectares of farmland in the highlands of Réunion Island.

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