

**'Extinct' species rediscovered in Mauritius**

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An individual of *Trochetia parviflora* Bojer ex Baker (Sterculiaceae), a Mauritian endemic species not seen in the wild for 138 years, was discovered in April 2001. The plant, a healthy bush two metres tall and bearing at least 300 immature fruits was found by a team of the Mauritius Herbarium in a nature reserve on the Corps de Garde Mountain, south west of Port Louis the capital city. It is growing in a region of steep cliffs towards the lower reaches of the mountain's western scarp in association with several native species characteristic of dry forests.

The botanist Du Petit Thouars discovered the species during his stay in Mauritius ca. 1794 (Du Petit Thouars 1811). His specimen, without locality and bearing ripe fruits, is kept in the Paris Museum (Bossier *et al.* 1987). The plant must have been rare even then since it was found only twice thereafter; first in the 1830s on Montagne du Pouce, then in March 1863 by P. Ayres on Montagne Ory south of Port Louis (Bossier *et al.* 1987). Despite repeated surveys conducted in its known geographical range, the species could not be found again. Indeed it is probable that it is now extinct in the mountains around Port Louis. The rediscovered plant was found outside the known range of the species, at some 6km to the south west of the closest known historical site of the plant.

The genus *Trochetia* is endemic to Mauritius and Réunion and comprises 6 species (Mabberley 2000). Five are confined to Mauritius and one to Réunion (Bossier *et al.* 1987). *Trochetia* is a well known genus in Mauritius since one of the species, *T. boutoniana* was, in 1992, declared as the National Flower. Indeed, *Trochetia* spp. have beautiful flowers and although only two species are in cultivation, Bossier *et al.* (1987) considers that all deserve to be used as horticultural small trees. It is interesting to note that *T. parviflora* did make an appearance in the list of plants cultivated in the Jardin des Pamplemousses (Cantley 1880). It was however never to be mentioned again in the succeeding inventories (Anon. 1926, Rouillard & Guého 1999) indicating a very short lived presence in cultivation. Half a century or so after the last record of a live plant, the species was said to be "very rare" (Vaughan 1937), then "on the brink of extinction" (Vaughan, 1958). Several botanists were still conserving the hope that the plant could one day be rediscovered on the slopes of Montagne du Pouce (Friedmann *et al.* 1979, Bossier *et al.* 1987). But 130 years after the last sighting in the wild, the species was finally classified as extinct (Strahm 1993). Since the rediscovery, the team of the Mauritius Herbarium intensified its efforts to find further plants on the Corps de Garde mountain and to date the known wild population stands at 73 individuals.

It is interesting to note that the species which was described as "a much branched

low shrub" (Baker 1877) could in fact grow to over 4m high with a basal diameter of 30cm. Furthermore, although the plant's flower had been seen (Bojer 1837), it seems its colour was not noted. This led to some speculations that the flowers were reddish (Vaughan 1937) or red (Vaughan 1958). All the flowers we found were white with a slight tinge of pink along the edges of the petals. The nectar, observed only on an old flower, is brown.

Although a number of the plants found are juveniles of all stages indicating a fairly good natural regeneration, ecological data collected is unravelling a worrying trend. It seems that competition with alien weeds like *Schinus terebinthifolius* Raddi and *Hiptage benghalensis* (L.) Kurz is gradually pushing the *T. parviflora* plants to regenerate primarily in the steepest regions of the mountain. These areas may not only be suboptimal habitats for the plants but could also increase the risks of extinction of the population due to stochastic factors because such places would experience a greater incidence of landslides. Furthermore, effects of any drought can be expected to be more pronounced on plants pushed to grow in steeper and more rocky environment. Another concern is that all known wild *T. parviflora* belong to a single population, a situation that would greatly enhance chances of extinction in the event of a disease or fire striking the area. It seems therefore that conservation action is essential to ensure the survival of both the population and the species. A project proposal submitted for funding to the Chicago Zoological Society via the IUCN/SSC Indian Ocean Islands Plant Specialist Group has been approved and US\$ 2,500 secured for a first conservation management intervention to save the species. The ultimate aim is to restore a self-sustaining *in-situ* population and establish safeguard populations in arboreta and botanical gardens. The first step would be the control of alien weeds in the immediate vicinity of the plants while stocking up seedlings in nurseries of the Mauritius Herbarium, Forestry Services and National Parks and Conservation Services. At a later stage, it is planned that larger areas of forest be weeded to make them suitable for the establishment of new colonies that would help reduce extinction risks from stochastic factors thus ensuring long-term *in situ* survival. The conservation of this species would be an excellent opportunity to further conservation awareness in Mauritius given both the emblematic name of the plant as well as its high horticultural value due to its exquisite flowers.

## References

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