The Pepper-bark Tree

by Phakamani Xaba

Rhodolldla Nelson Mandela's Pepper-bark Tree 14 years after he planted it in Kirstenbosch. Photo: P. Xaba.

This is the eleventh in a series of articles on indigenous plants that have traditionally been used by humans in southern Africa for food, medicine, crafts, and charms. Some of these plants are now threatened while others that once formed an important part of our diet have been forgotten. It is hoped that these articles will help revive an interest in growing, using and conserving a valuable indigenous resource. Please note that cited information about medicinal use of plants does not constitute a recommendation for their use for self-treatment. Improper or uninformed use of wild plants can be extremely dangerous.

Learning to grow and use these plants will help: Promote sustainable use of these plants; Provide practical growing information especially for threatened species; Reduce pressure of harvesting from natural populations in the wild; Inform the general public about indigenous useful plants; Preserve indigenous knowledge.

Conservation status and threats

Warburgia salutaris is listed as Endangered in the latest (2009) IUCN Red List of Threatened Species. Apart from some remote populations in Limpopo Province, the tree is extremely hard to find in the wild and is on the border of becoming extinct through much of its natural range. Overharvesting, indigenous timber clearing for commercial forestry, agriculture and human living requirements and the poor germination of seed all threaten the tree’s future existence in the wild.

Considerable effort is being put in to bringing the species back from extinction. In 1996 the Pepper-bark was named as Tree of the Year as part of the South African government forestry initiative to promote indigenous tree conservation and knowledge. A highlight of the campaign that year was when former President Nelson Rolihlahla Mandela planted a Pepper-bark at the entrance to Kirstenbosch.

Fortunately the Pepper-bark grows easily and well from cuttings and a number of experimental plantings have been done by botanical gardens and conservationalists as well as by some commercial growers. These are usually only harvested when the trees are at least 10 years old.

A particularly impressive conservation effort is Durban Metrol’s Silverline Nursery which not only grows Pepper-bark cuttings on a fairly large scale but has also been running plant-growing education programmes and distributing cuttings to hundreds of traditional healers and herbalists since 1996.

Wild harvesting of the pepper-bark is on the border of extinction and much of the wood is only being harvested illegally. In addition the species is in demand from the traditional medicine market and the tree is being harvested for its hard wood.

The Pepper-bark, or Isibhaha, and its close relatives in central and east Africa have for centuries been amongst the most sought-after sources of traditional medicine. The bark, roots and, latterly, even the leaves are harvested and then dried for use in powdered form, or as infusions and decoctions, as a remedy for many conditions including oral and vaginal thrush, bronchial infections, coughs, chest complaints, colds, headaches, rheumatism, venereal diseases, toothache, gastric ulcers and malaria. Strong and growing demand for the Pepper-bark in traditional medicine suggests a useful additional long-term investment strategy for farmers in areas suitable for its growth.

Horticulturally, the Pepper-bark is a beautiful and versatile landscape tree with its glossy, deep green foliage and oval shape. Pepper-bark trees planted close together can also be pruned into an attractive evergreen hedge. The Pepper-bark is also a soil-improver which fixes nitrogen and its prunings make an excellent green manure and mulch.

Below: The Pepper-bark tree, Warburgia salutaris with full leafy canopy. Photo: P. Xaba.

An easy guide to growing Pepper-bark

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<td>Seed harvesting and preparation</td>
<td>4 cm in diameter, oval fruits are dark purple when ripe. Soak fruits in cold water overnight and then remove the skin and flesh to expose seed.</td>
<td>Seed ripens between October and December. Seed must be scarified, i.e. seed must be fresh as they will not germinate if dried out.</td>
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<td>Seed sowing, germination</td>
<td>Sow seed in tray with river sand and lightly cover them by sowing river sand on top. Keep tray moist. Treat the seed with a anti-fungicide of growing in large volumes.</td>
<td>Seeds will germinate and emerge in about 21 days; about 80% will germinate within 2 months of sowing. Leave seedlings in trays until they reach 3 cm in height (2 leaf stage). Pot the seedlings once a month, with a general mixture of sand (1), loam (2) and compost (1). Add Bounceback® to your potting mix. Plant can be re-potted next summer.</td>
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<td>Vegetative cutting preparation</td>
<td>Cut 15 cm apical shoot tip cleanly, and remove any leaf scars by cutting and keep them in a bucket of water until ready to stick in ready medium such as coarse river sand or silica sand. Semi-hardwood cuttings root best. A hard wood rooting hormone helps speed the process.</td>
<td>Cuttings taken late spring to mid-summer. For optimum rooting take cuttings in December. It takes 3-6 weeks for the cuttings to root. Wound can be 2 weeks by time rooted cuttings can be transplanted into a small container. Rooted plants can be sown in semi-shade for 2-3 months then plants can be exposed to full sun.</td>
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<td>Cultivation</td>
<td>Planting is best carried out in the winter months (June-July). Plant in a 1 x 1 m hole with a generous mixture of compost and a hand full of Bounceback® and bonemeal. Plants thrive in full sun and do well in light shade. Pruning can be best done in winter. Harvesting of the leaves can be done throughout the year with summer being the peak season. The Pepper-bark makes an excellent hedge when planted half a metre apart.</td>
<td>Peppercorn tree transplants easily in midwinter (June). Plants must be pruned back hard, removing all leaves. The plant should be removed as much as possible of the rootball. Long hanging, excess roots can be trimmed off.</td>
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