The Lemon Bush

by Phakamani Xaba, SANBI, Kirstenbosch National Botanical Garden and Rosalie McKay

The Lemon Bush (Lippia javanica) is a strongly fragrant, medicinal plant indigenous to southern and tropical Africa. A hardy, untidy, multi-stemmed shrub of the open grassland and bushveld, it gives off an intense lemon scent when crushed. Traditionally the leaves have been used for their strong scent as an insect repellent and placed in linen cupboards and potpourri jars, or medicinally in an infusion for fevers, ‘flu, placed in linen cupboards and potpourri jars, an intense lemon scent when crushed.

**Traditional and future uses**

This plant is well known medicinally to many African tribes and to many avid herbalists. The leaves (and stems) are made into a tea as a cough and cold remedy, to bring down fever and to treat malaria. It is also excellent for treating skin problems, scabies and scalp infections. Some people inhale the smoke for asthma and chronic cough. Preparations are also used as an anti-inflammatory to soothe sore muscles.

**Commercial availability**

The Lemon Bush is found in grasslands throughout much of eastern and central Africa. A hardy, drought-resistant plant that grows easily from seed in a variety of soil types.

**Pests**

It is possible that the aromatic leaves protect this plant as animals do not browse it except under extraordinary circumstances.

**Conservation status**

Despite its popularity for traditional medicine and charm use, the Lemon Bush is widespread in the wild and locally abundant in some areas. It is a hardy, drought-resistant plant that grows easily from seed in a variety of soil types.

**What does it look like?**

The Lemon Bush is an erect, multi-branched, woody shrub that grows 1-2 m tall. Stems are more or less square in cross-section. The 3-4 cm-long leaves are hairy on both sides and have dentate, lightly toothed, margins, and are rough to the feel with deeply sunken veins from above. Leaves are opposite, often in whorls of up to four and have a characteristic lemon scent when crushed. Small cream-white flowers clustered together in dense, round spikes about 1 cm in diameter are produced between February and May but can be found throughout the year. Seeds are small brown nutlets.

**Seed harvesting and preparation**

Seeds are small, brown, dry nutlets when ripe. No treatment is necessary as seed is well in light shade. Sow in seed trays or any other suitable properly prepared beds. No treatment is necessary as seed is easily germinated and grown under most conditions. Seeds are small, brown, dry nutlets when ripe. No treatment is necessary as seed is easily germinated and grown under most conditions.

**Sowing**

Sow in seed trays or any other suitable properly prepared containers. The seed can also be sown in prepared beds. This is one of the most rewarding of all wild herbs to grow.

**Vegetative cutting preparation**

Take 5-8 cm apical shoot tip cuttings. Semi-hardwood cuttings rooted best. A rooting hormone such as 1% IBA helps speed up the process. These can be re-potted into a larger pot, and well in light shade. Plants thrive in full sun but also do well in light shade.

**Cultivation**

Ideally, beds should be weed-free with loose soil and light watering, but they tolerate a wide variety of soil types and are drought resistant.

**Commercial availability**

The Lemon Bush is rich in volatile oils including myrcene, caryophyllene, linalool, cymene and isopulegol and is farmed commercially in South Africa and Kenya for essential oil production for the perfume industry. Geographical variations have been identified in the concentration and proportions of the active compounds which have been demonstrated in the laboratory to have decongestant, antiasthmatic and anti-inflammatory activity.

Clinical studies using human volunteers have also shown that Lemon Bush extract is a more potent malaria vector mosquito repellent than most available commercial formulations. As a consequence the South African government’s Council for Scientific and Industrial Research (CSIR) has isolated, characterized and patented a formulation and set up a rural community partnership in Giyani, Limpopo Province, to grow Lemon Bush on a commercial scale. The cold-pressed extract is being processed for large-scale production of anti-mosquito candles and other insect repellants. Giyani’s Hi Hanyile has the capacity to manufacture 400 000 candles a year. Each 250 g candle can burn for up to 55 hours and retails for about R20.

**An easy guide to growing**

**ACTIVITY**

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