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Biodiversity for Life
South African National Biodiversity Institute

2024 trees of the year

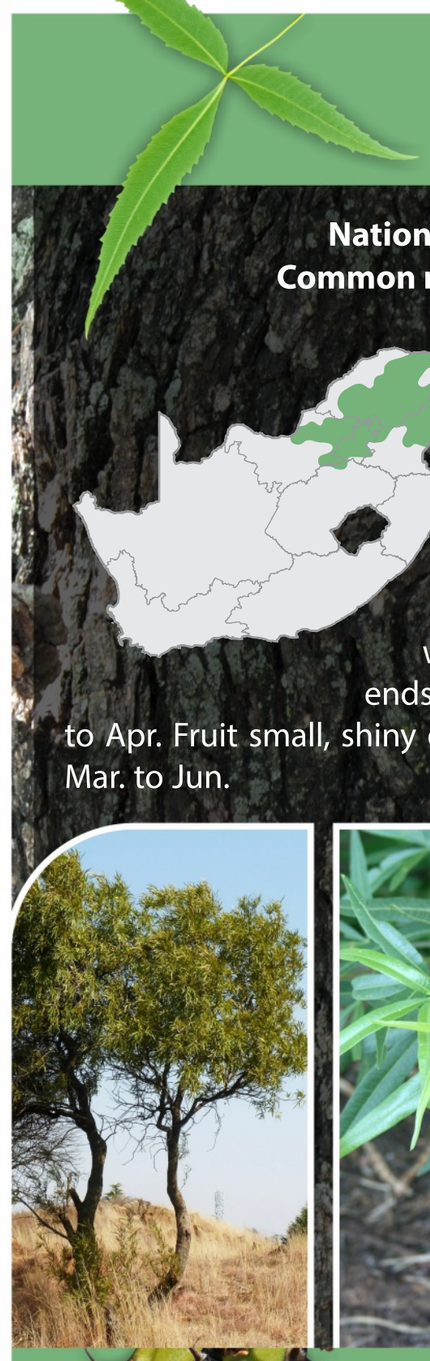
Searsia lancea



National tree number: 386. **Family:** Anacardiaceae
Common names: Karee, willow crowberry (English).

Semi-evergreen tree, up to 9 m high. Bark rough with irregular cracks, dark brown to blackish. Branches reddish, tending to droop. Leaves dark olive-green above, pale yellow-green below, with 3 leaflets. Leaflets slender to lance-shaped, middle leaflet larger. Flowers small pale greenish yellow, in axils or at ends of branches, Jun. to Sep. Fruit small, shiny drupe, dull yellow-brown with one seed.

Searsia leptodictya



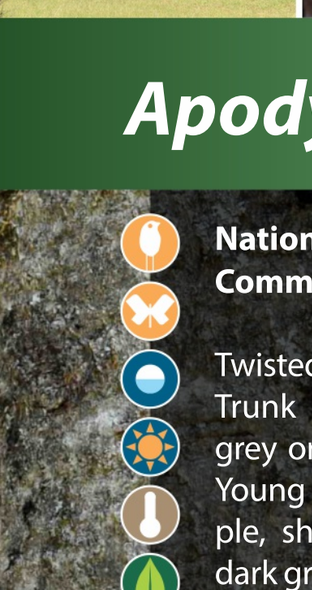
National tree number: 387. **Family:** Anacardiaceae
Common names: Mountain karee, rock karee (English).

Tree, up to 9 m high, irregular rounded crown. Bark rough, grey to blackish with lines. Branches hang down, young ones reddish brown with spots. Leaves have 3 lance-shaped leaflets, usually toothed with middle leaflet bigger, hairless, dull green above, lighter below, with distinctive smell. Flowers in axils or at ends of branches, small, pale yellow to cream, Dec. to Apr. Fruit small, shiny drupes, flattened, with kidney-shaped seeds, Mar. to Jun.





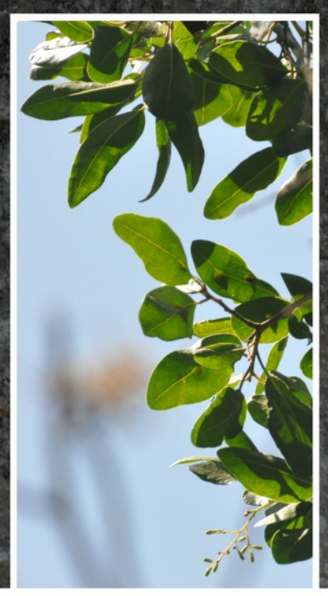
Apodytes dimidiata



National tree number: 422. **Family:** Icacinaceae
Common names: White pear, bird's eye (English).



Twisted, evergreen tree, up to 20 m high. Trunk seldom round, bark white, pale grey or pale green, peeling in patches. Young stems purplish red. Leaves simple, shiny, alternate, slightly leathery, dark green above and lighter below. Flowers bisexual, on branched stalks, cream to white, heavily scented in morning, Sep. to Apr. Fruit small, not splitting open, green when young, black or red when mature, with thin style remaining, very sparsely hairy, Dec. to Jun.



Euphorbia sekukuniensis



National tree number: 353. **Family:** Euphorbiaceae
Common name: Sekhukhune euphorbia (English).



Upright, small, spiny, succulent tree, up to 7 m high, single main stem with vertical lines from old branches. Lower branchlets point downward, forming dense crown like a candle holder. Spines are in pairs, with horny margins. Cluster of flowers cup-shaped, yellow-green, on short stems near branchlet tips. Fruit 3-lobed, turning red when ripe.






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Attracts birds
Attracts insects
Requires full sun
Frost-resistant
Drought-resistant
Moderate water
Evergreen
Deciduous
Edible
Poisonous
Medicinal use
Useful wood

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- https://pza.sanbi.org/searsia-leptodictya
- https://pza.sanbi.org/apodytes-dimidiata-subspdimidiata


Searsia lancea


Searsia leptodictya


Apodytes dimidiata


Euphorbia sekukuniensis

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REPUBLIC OF SOUTH AFRICA

30 YEARS OF FREEDOM

2030 NDP

SANBI
Biodiversity for Life
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2024
trees of the year



BIODIVERSITY KNOWLEDGE INTO POLICY AND ACTION

The **South African National Biodiversity Institute** (**SANBI**) is a state entity under the Department of Forestry, Fisheries and the Environment, whose mission is to champion the exploration, conservation, sustainable use, appreciation and enjoyment of South Africa's exceptionally rich biodiversity for all people. SANBI uses basic information on biodiversity and builds on this foundation through assessments, experiments, models and tools to provide evidence-based advice. In this way we influence policymakers and citizens and contribute to government's higher objectives of resilient biodiversity for poverty alleviation, job creation and improving human wellbeing. SANBI provides knowledge for ecosystem restoration and rehabilitation, leads the human capital development strategy of the sector, and manages eleven national botanical gardens and two zoological gardens as windows to South Africa's biodiversity for enjoyment and education.

FOUNDATIONS OF BIODIVERSITY

Our work starts with a strong foundation through surveying, classifying and mapping South Africa's ecosystems and species.

STATE OF BIODIVERSITY

We build on this foundation through assessments and monitoring, to answer questions about the status of our biodiversity and the best ways to protect it and its benefits to society.

SCIENCE INTO POLICY AND ACTION

Using this knowledge we translate science into policy and action by creating tools and information resources, and giving policy advice that assists those who make decisions about land use and natural resources, while aiming for objectives such as poverty alleviation, job creation and improved human wellbeing. Biodiversity sustains us through providing water and energy; nourishes us through providing food; inspires us through education and art; protects us through providing shelter; connects us through our heritage; and empowers us in terms of development and economic growth. Through all of this biodiversity and natural resources provide opportunities for job creation, improved service delivery and a better life.

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Searsia lancea (L.f.) F.A.Barkley

National tree number: 386 **Family:** Anacardiaceae
Common names: Karee, willow crowberry (English); *karee, kareeboom* (Afrikaans); *mofitahuntšokhu* (Sepedi); *mosêbêlê* (Sesotho); *mushakadzda* (Tshivenda); *umhlakotshane* (isiXhosa)

General appearance
Karee is a semi-evergreen, well-rounded tree that grows up to 9 m high; in favourable conditions can grow up to 12 m high, with dark brown to blackish bark. The bark is rough, often twisted or crooked, with irregular cracks. The branches are reddish and tend to droop. It may also develop into a scrubby bush. The leaves are dark olive-green above and pale green-yellow below. The leaves have three leaflets that are linear to lance-shaped, olive-green above and pale below, 25–72 × 4–12 mm) larger than the side leaflets (12–72 × 4–19 mm), almost at right angles to the central one. The leaves are leathery, dull green above and slightly lighter below with narrowly tapering apex and base; crushed leaves have a distinctive smell. Both leaf margins are usually shallow to deep-toothed and rarely entire. The midrib is slender and raised on both surfaces, sometimes with very short hairs. Secondary veins are prominent above and below. The flowers are terminal and in axillary sprays, small, pale yellow to cream, male and female flowers on separate trees. Flowering from December to April. The fruits are small, shiny drupes, light to dark brown, almost square-shaped and flattened, with kidney-shaped seeds. Mature fruits are yellow to red-brown. Fruiting from March to June.

Distribution and habitat
It naturally occurs on rocky hillsides, in bushveld and open woodland and at forest margins. The plant is widely distributed from the Free State, northwards through Gauteng, along the eastern border of the Northern Cape, North West, Mpumalanga and Limpopo provinces, and into Botswana, Zimbabwe, Eswatini, Mozambique and Malawi.

Meaning of name
Searsia – named after Paul Bigelow Sears (1891–1990), who was an American ecologist who pioneered the study of fossil pollen in the USA and head of the Yale School of Botany.
lancea – a Latin word meaning light spear or lance, referring to the shape of the leaflets.

Ecology and uses
It's widely used as horticultural subjects such as street and garden trees. The tree can serve as a and barrier and makes good shade • The wood is hard, tough and durable • The wood is used to make pick handles, fence posts and for firewood • Branches are used to make baskets • The San used supple branches to make their bows • The sweetly scented flowers attract insects like bees • Fruits are edible but great tasting, remove tough skin before eating by rubbing with your hands or soaking in milk • Fruit pounded in water is used to make a pleasant beer and it also makes an excellent poultry feed.

As a garden tree
It is a good shade tree making it ideal for both streets and gardens. It is suitable for use as a large hedge along boundaries. The root system is not aggressive. The tree can withstand drought and it is adaptable to a variety of soils. It is easily propagated from seeds, cuttings or layers. Cuttings can be taken using young growth from September to October. Ripe seeds can be collected and sown in seedling trays. Transplanting of the seedlings to a pot or bigger container should be done when the second leaf has emerged. It's a fair-growing tree and can grow up to 0.8 m a year. After the root system has been established it doesn't require any special attention.

Searsia leptodictya (Diels) T.S.Yi, A.J.Mill. & J.Wen

National tree number: 387 **Family:** Anacardiaceae
Common names: Mountain karee, rock karee (English); *bergkaree* (Afrikaans); *motshokhut-shokhu, mohlwhlwe* (Sepedi); *mlangusfane* (Siswati); *motshotlwane* (Setswana); *mushakadzda* (Tshivenda)

General appearance
The mountain karee is a deciduous, spreading, medium-sized tree up to 9 m high. The bark is rough dark grey to blackish and longitudinally furrowed. The branches are hanging down and smooth, young branches are reddish brown with spots and may have velvety hairs. The leaves have three lanceolate leaflets, usually toothed with central leaflet bigger (25–110 × 6–25 mm) than the side leaflets (12–72 × 4–19 mm), almost at right angles to the central one. The leaves are hairless, dull green above and slightly lighter below with narrowly tapering apex and base, crushed leaves have a distinctive smell. The leaf margins are usually shallow to deep-toothed and rarely entire. The midrib is slender and raised on both surfaces, sometimes with very short hairs. Secondary veins are prominent above and below. The flowers are terminal and in axillary sprays, small, pale yellow to cream, male and female flowers on separate trees. Flowering from December to April. The fruits are small, shiny drupes, light to dark brown, almost square-shaped and flattened, with kidney-shaped seeds. Mature fruits are yellow to red-brown. Fruiting from March to June.

Distribution and habitat
It naturally occurs on rocky hillsides, in bushveld and open woodland and at forest margins. The plant is widely distributed from the Free State, northwards through Gauteng, along the eastern border of the Northern Cape, North West, Mpumalanga and Limpopo provinces, and into Botswana, Zimbabwe, Eswatini, Mozambique and Malawi.

Meaning of name
Searsia – named after Paul Bigelow Sears (1891–1990), who was an American ecologist who pioneered the study of fossil pollen in the USA and head of the Yale School of Botany.
lancea – a Latin word meaning light spear or lance, referring to the shape of the leaflets.

Ecology and uses
It is a sacred and garden tree • Branches are used to line the nests of Black Eagles and have a disinfectant property that helps protect the nests from diseases • Animals such as giraffe and eland consume the leaves • An intoxicating liquor can be made from fermenting the fruits • Fruits are edible but sour • Attracts birds such as white-eyes and bulbuls • Seeds are dispersed by birds.

As a garden tree
This species is easily propagated from seeds and grows well in cultivation. Seeds germinate readily and are fast growing. It will attract birds in your garden. The seeds should be removed from pulp after harvesting and grown during summer. Soak the seeds overnight as this will help with germination. The seeds can be planted in seedling trays filled with potting soil and covered lightly with sand. Water it moderately and do not allow the trays to dry out. Seedlings can be transplanted when two leaves have appeared. Place the plant in full sunlight. The first few years the mountain karee needs to be pruned into a tree shape by removing low-growing branches. The plant grows in a variety of soils and the roots are non-invasive. It is frost and drought resistant.

Apodytes dimidiata E.Mey. ex Arn.

National tree number: 422 **Family:** Icacinaceae
Common names: White pear, bird's eye (English); *witpeer* (Afrikaans); *sephophamadi, kgadagangwe* (Sepedi); *umdzakeza* (Siswati); *tshiphophamagi* (Tshivenda); *umdokane* (isiXhosa); *umdokane* (isiZulu)

General appearance
White pear is a small bushy, twisted, evergreen tree, reaching up to 20 m high. The trunk is irregular and seldom round. Smaller isolated trees have compact crowns. The bark is smooth white, beige/grey or pale green, and becomes roughish and darker with age, which may peel off in patches. Young stems may be purplish red with brown hairs. The leaves are simple, shiny, alternate and slightly leathery, spirally arranged, oval leaves are dark green above and lighter below. The leaf apex is narrow to broadly tapering, sometimes slightly notched, the base is broadly tapering with entire, wavy or rolled-under margins. The flowers are bisexual, terminal, cymose panicles and in leaf axils or branched tails. The flowers are cream to white in colour and are heavily scented in the morning. Flowering from September to April. The fruits are small indehiscent, sparsely hairy, green when young, with one half coloured black and other kidney-shaped half red, with a persistent style which remains on one side of the base. The fruits are borne in December to June.

Distribution and habitat
The white pear is mainly found in low to medium-altitude forests, in montane forest margins, riverine thickets, coastal forest and scrub, and rocky grassy mountain slopes. In the Western Cape occurs in forests in Mpumalanga, Gauteng, Limpopo and North West. It also occurs in Eswatini, Mozambique, Zimbabwe, and northwards into tropical Africa, Kenya to Ethiopia and Nigeria.

Meaning of name
Apodytes – a Greek word which means to strip off, referring to the calyx that is too small to cover the corolla petals.
dimidiata – means divided into two, referring to the half-coloured fruit.

Ecology and uses
Both leaves and the bark are browsed by black rhino • Leaves are used by the Zulu people to treat ear inflammation and an infusion of the root and bark as an enema for intestinal parasites • The wood is very hard, and it is used for making furniture and in the past was valued for making wagons • Flowers are pollinated by bees • Fruits are eaten by birds.

As a garden tree
The white pear is used as a garden tree to establish shade throughout the year. The plant is easily propagated from seeds, sown in late winter or early spring. Before propagating, seeds should be dipped in a fungicide. Seeds can be planted in seedling trays or pots filled with well-drained, compost-rich soil 3–5 mm deep, lightly covered with fine sand or fine compost. The seed trays should be kept moist. Germination is slow and can take 6 months for all the seeds to germinate. Despite being a slow-growing plant when young, they will grow fairly fast when bigger. Young trees should be protected from frost for the first year. The roots are non-invasive. The fruits cause little mess in paved areas and small gardens.

Euphorbia sekukuniensis R.A.Dyer

National tree number: 353 **Family:** Euphorbiaceae
Common names: Sekhukhune euphorbia (English); *sekhukhune-naboom* (Afrikaans)

General appearance
Sekhukhune euphorbia has an upright, stout, single tree trunk up to 7 m high. It ends in four- to five-angled succulent branchlets that are up to 1 m long and 20 mm wide. The branchlets have slight constrictions, at intervals up to 200 mm, from where they might branch again. The lower branchlets point downward. Collectively the branchlets make up the dense candelabra crown (appearance of a candle holder). Along each margin of the branchlets, there is a strip of paired spine shields, red when young, becoming grey, stout and rigid. These shields widen at each pair of spines. Older branches fall off to form round holes, which are arranged to form 8–10 vertical lines that remain there for some time. In the old bark the holes are not visible. The cyathium (3-cup-shaped structure) inflorescence is horizontally arranged on a very short stalk. The inflorescences are yellow-green and occur near branchlet tips on the ridge above the paired spines. The male flower and female flowers are not in the same flower, the male flowers surround the single female flower. Each male flower is reduced to a single stamen. The yellow flowers are surrounded by glands and appear from August to September. The flowers are followed by three-lobed fruit called capsules, 8–9 mm in diameter. The fruit turn red when mature. Fruiting from September to December.

Distribution and habitat
The plant occurs in specialised habitats and is endemic to Sekhukhuneland and in the Steelpoort River Valley. It is also found in southern Limpopo and slightly over the border of Mpumalanga on rocky outcrops in the Leolo Mountains. It can also be found in savanna.

Meaning of name
Euphorbia – from *Euphorbos*, a Greek physician of the king Juba of Mauretania. *Euphorbia* is from a Greek word *euphorbe*, that means 'good pasture'.
sekukuniensis – plants found in the Sekhukhuneland named after the 19th century king Sekhukhune, the king of the Bapedi nation from 1861 until his assassination in 1882.

Ecology and uses
Its flowers attract butterflies and other insects • Mature fruit dry and open to release the seeds. The seeds are dispersed by the wind in late summer to autumn and remain in the ground during the winter season and germinate during the summer-rainfall season • The succulent stems and branches store water for the dry season and its shallow root system makes it more adaptable for growing in rocky areas • It contains caustic milky latex, which is very poisonous and any contact with skin, eyes and mouth can cause severe pain, blistering, allergic reaction or even blindness • There is no record of it being used for medicinal or cultural purposes.

As a garden tree
The Sekhukhune euphorbia is commonly used for landscaping in South Africa. It grows very well in rocky areas and requires moderate watering. During winter, only water when the plant shows signs of wilting. This is a slow-growing and light frost-resistant plant. It thrives in hot climates. It is easily propagated from both seeds and cuttings, that should be left for about 3 to 4 days for the milky latex to dry before planting. Seeds can be harvested in spring and late summer and sowing is best done in autumn. Sow in seedling trays or pots filled with well-drained soil mixed with coarse river sand, use coarse bark at bottom for good drainage. Keep moist but not waterlogged, as this can cause the plant to rot. Keep in a warm area and in full sunlight.