

# Mountain Woodruff

(Asperula tetraphylla)

This plant is endemic to Kangaroo Island and was named because of the stiff, rough hairs on the leaves ('asper' = rough in Latin), and the four whorled leaves ('tetra'= four in Greek). The species has a conservation status of Vulnerable in South Australia and is considered endangered at the federal level.

#### **General Description**

- A prostrate perennial, forms a mat with slender erect stems to 10 cm long, sparingly branched, sparsely covered in short hairs.
- Leaves: covered in short hairs in whorls of 4, elliptic, ovate or rotund to 6 mm x 6 mm, tapering strongly at base; thin to slightly fleshy; margin flat, curved down.
- Flowers: white, numerous in terminal clusters, shorter than the leaves.
- Fruit: brown, kidney-shaped to 3 mm long, wrinkled.



#### Do not confuse it with:

• **Galium spp. (Bedstraws):** are generally more straggly plants with flowers scattered along stem and 'velcro-like' hairs .



#### MOUNTAIN WOODRUFF (Asperula tetraphylla)





#### Threats

- Weed invasion, especially after bushfires & flooding.
- Climate change resulting in increased frequency, duration and intensity of extreme events such as droughts, bushfires and flash flooding.
- Feral pigs can damage and destroy populations and their habitat.
- Roadworks can destroy plants growing near roadsides if not undertaken carefully.

#### Biology/Ecology

- Flowers between October and January.
- Resprouts from perennial rootstock after a fire.

#### Habitat

Heavy silts and clay soils on river banks and billabongs; likely under water during high flow.

#### Distribution

Endemic to Kangaroo Island, restricted to two rivers in the south-west — please see distribution map below:



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



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# Kangaroo Island Heath-myrtle

(Calytrix smeatoniana)

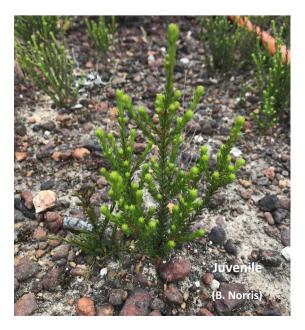
This plant is endemic to Kangaroo Island and has a conservation status of Rare in South Australia. It gets part of its name from its hairy appearance ('thrix' = hair in Greek), and was also named after Thomas Drury *Smeaton*, who migrated to Australia from London as a bank clerk and plant collector.

#### **General Description**

- Small erect shrub to 1 m high, covered in minute spreading hairs.
- Leaves: linear, to 3 mm by 0.5 mm, covered with hairs.
- Flowers: small clusters of pinkish white flowers with pink centre, 5 petals.
- Fruit: brown, squarish to 4 mm by 3 mm, covered in hairs.



- Calytrix tetragona: long red bristles on sepals; longer leaves, up to 12 mm by 1 mm.
- **Calytrix glaberrima:** leaves smooth, not hairy.



#### KANGAROO ISLAND HEATH-MYRTLE (Calytrix smeatoniana)



## **Biology/Ecology**

- Flowering between August and December.
- When the mature plant was fully burnt, post-fire recovery was by seed only.

#### Threats

- Weeds such as Tasmanian blue gum compete with the species at some sites.
- Has been found near to infestations of the introduced pathogenic root mould Phytophthora cinnamomi but it is not known if it is susceptible to this disease.

#### Habitat

Habitats range from ironstone soils on the ridge of plateaux, and gentle upper slopes of river valleys, to sandy soils on gentle slopes leading down to ephemeral lagoons.

eedling

(R. Davies)

#### Distribution

Confined to the western-most quarter of Kangaroo Island with an outlier in Seal Bay Conservation Park:



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



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# Twining Finger-flower

(Cheiranthera volubilis)

This plant is endemic to Kangaroo Island and has a conservation status of Vulnerable in South Australia and nationally. Its genus name (*Cheiranthera*) comes from the five anthers resembling fingers ('cheir' = hand in Greek), whilst its species name comes from its twining habit ('volubilis' =

#### **General Description**

- Weak twining perennial climber with long linear leaves and large blue flowers at the top of the stems.
- Leaves: linear, 5-17 mm x 0.5-1 mm, nearly cylindrical, concave upper surface, hairless.
- Flowers: single; stalks 15-45 mm long, more or less twining; sepals narrow, 4.5-5 mm long, hairless; petals elliptical, 12-15 mm long, dark-blue inside, pale outside; yellow anthers arranged like fingers.
- Fruit: brown egg-shaped capsules, with numerous seeds inside.

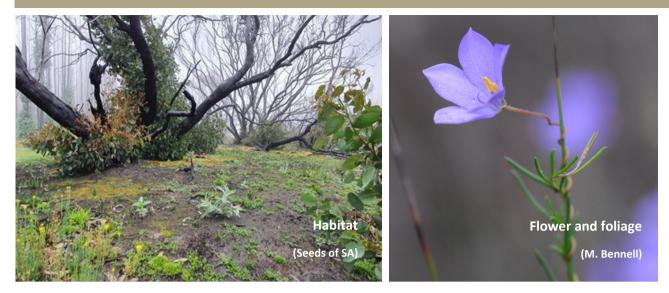


#### Do not confuse it with:

• **Cheiranthera alternifolia:** generally not twining, longer flatter leaves; flowers in a flat-topped cluster of 2-11.



#### TWINING FINGER FLOWER (Cheiranthera volubilis)



#### Threats

- Most populations are small and risk losing genetic diversity, as well as extinction from detrimental disturbance events.
- Weeds like Tasmanian blue gum threaten to outcompete the species at some sites.
- Roadworks can damage and kill plants found on roadsides if not done carefully.
- Has been found near to infestations of the introduced pathogenic root mould Phytophthora cinnamomi but it is not known if it is susceptible to this disease.

#### **Biology/Ecology**

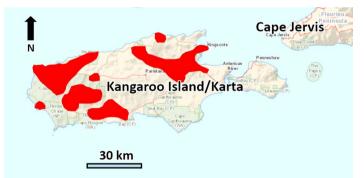
- Flowers between October and March.
- Regenerates after fire from root stock.

#### Habitat

Slightly acidic sandy or sandy loam soils, in mallee dominated by Eucalyptus baxteri or E. remota.

#### Distribution

Endemic to the western two thirds of Kangaroo Island, occurring as far east as Birchmore Lagoon.



#### **Further information**

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# Kangaroo Island Spiked Sour-bush

# (Choretrum spicatum ssp. spicatum)

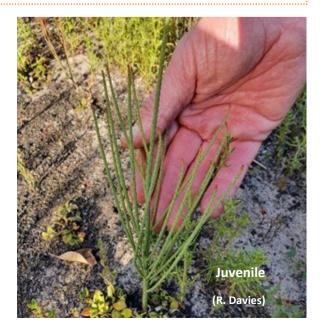
This semi-parasitic plant is only found on Kangaroo Island and has a conservation status of Vulnerable in South Australia. The seed is hard to germinate and we don't yet understand its germination triggers. Its species name ('spica' = spike in latin), comes from the spike of flowers along the stem.

#### **General Description**

- An erect perennial, green shrub to 1.5 m high.
- **Branches:** rigid, woody, cylindrical, ridged length-wise.
- Leaves: very small, brown, scale-like, stemless, upwards or horizontal, can be curved backwards, remaining attached.
- Flower heads: on a single stalk, bearing many small white 5-petalled flowers.
- Fruit: green-brown, spherical, fleshy, to 5 mm long, with length-wise ribs.



- Choretrum glomeratum: yellow-green willowy stems; flowers in clusters of 2-5 on short stems, along the flower stalk.
- Other understorey shrubs that appear to lack foliage; e.g. *Acacia spinescens, Exocarpos* spp.



#### KANGAROO ISLAND SPIKED SOUR-BUSH (Choretrum spicatum ssp. spicatum)





## Biology/Ecology

- Adult plants killed by fire, the species regenerating from seed.
- · Flowers mostly in October to December but can flower earlier or later depending on rain.

#### Habitat

Clay loams and sandy loams with iron stone gravel, on undulating plateaux and slopes leading down to ephemeral water courses. Mostly in Eucalyptus remota low woodland and E. cosmophylla low open woodland.

# Distribution

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Endemic to the Kangaroo Island, confined to the western quarter of the Island.

Kangaroo Island/Karta

30 km



- Too frequent fires, especially followed by droughts, not allowing seedlings to reach maturity and produce adequate seed to replenish the soil seed bank.
- Climate change resulting in more frequent and intense droughts and bushfires.

#### **Further information**

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Cape Jervis



# De Mole River Correa

(Correa calycina var. halmaturorum)

This plant is only found in the vicinity of the De Mole River on K.I. and is Endangered in South Australia. Its species name *calycina* comes from the conspicuous calyx (the leaf-like part encasing the petals). The variety (*halmaturorum*) refers to Kangaroo Island ('halme' = leap/bound in Greek).

#### **General Description**

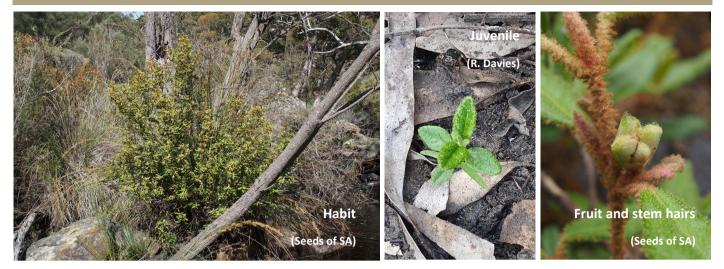
- Tall dense shrub to 3 m by 2 m, stems covered in dense, strongly rusty, woolly hairs.
- Leaves: oblong-elliptic, to 4 cm by 2.5 cm, margin slightly down-curved, rough to touch above, dense fawn / rusty hairs below.
- Flowers: single, on branchlets, tubular, green to mauve. Calyx (outer casing) lobes: narrow, tapering to a point.
- Fruit: pale brown capsule with 1- 4 segments enclosed by the calyx.



- Correa calycina var. calycina: sparsely or moderately dense star-shaped hairs on the leaf underside.
- *Correa decumbens*: sparser brown leaf hairs, pink-red flowers.
- Correa backhouseana: short, matted leaf hairs.
- Correa aemula: generally longer hairs.
- Location and habitat is important for identification.



#### DE MOLE RIVER CORREA (Correa calycina var. halmaturorum)



#### Threats

- Too frequent fires, especially followed by drought, not allowing seedlings to reach maturity and produce adequate seed to replenish the soil seed bank.
- Flash flooding following bushfires killing remnant unburnt adult plants on banks of river.
- **Climate change** resulting in more frequent and intense drought, bushfires, and flash floods.
- Potential post-fire spread of Tasmanian Blue Gums invading from upstream plantations, or competition from other weeds.
- **Pathogens:** The species is moderately susceptible to the root mould *Phytophthora cinnamomi*.
- Due to its **highly-restricted distribution**, the species is vulnerable to detrimental disturbance events.

#### Biology/Ecology

- Flowers from October to March.
- Adult plant is killed by fire. Following a fire, it regenerates only from seed. Seed may need fire to germinate.
- Can persist in long unburnt vegetation.

#### Habitat

On river banks and flood plain extending up lower steep slopes of river valley, especially where there is outcropping phyllite schist.

#### Distribution

#### Endemic to K.I., confined to the De Mole River.



#### **Further information**

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# West Bay Saw-sedge

(Gahnia halmaturina)

This plant is only found on Kangaroo Island, in the vicinity of West Bay and has a conservation status of Rare in South Australia. Its species name '*Halmaturus*' means 'Kangaroo' from the Greek *'Halme*' (= leap/bound), often applied to K.I. endemic species.

#### **General Description**

- Tufted perennial with short, compact rhizomes; flower stalks to 65 cm high, often paler than leaves.
- Leaves: spreading; margins tightly in-rolled especially when dried, sometimes almost cylindrical with a groove; dull green, pale to cream at base, to 70 cm by 1.8 mm.

- Gahnia hystrix: also a KI endemic; a smaller cushion-forming plant growing on limestone.
- **Gahnia trifida:** which has seed heads taller than the leaves.

- Sheath: pinkish brown to dark brown.
- Flower heads: pale to dark brown, linear in outline to 16 cm by 20 mm, several lateral branches.





#### WEST BAY SAW-SEDGE (Gahnia halmaturina)



#### Habitat

Rocky areas along the banks and floodplains of freshwater creeks. Microhabitat (above) unburnt in 2020 bushfire due to proximity to water.

#### Threats

- The highly-restricted distribution renders the species susceptible to decline from detrimental disturbance events.
- The species is susceptible to climate change since increased intensity and frequency of combined droughts, and bushfires, followed by flash floods, may kill mature plants and reduce survival rates of any seedlings.

#### Biology/Ecology

- Flowering between April and May.
- The seeds can germinate from seed after fire. However, it is not known how well adult plants can survive and reshoot after fire. Most observed plants weren't burnt by the 2020 bushfire due to their proximity to permanent water.

#### Distribution

Endemic to Kangaroo Island, restricted to one population near West Bay, Ravine des Casoars Wilderness Area.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



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# Kangaroo Island Spiky Saw-sedge

(Gahnia hystrix)

This plant is only found on Kangaroo Island's south, west and north coasts, and has a conservation status of Vulnerable in South Australia. The tiny spiky plant resembles a hedgehog ('*Hystrix'* = hedgehog in Greek) and grows in pockets of sand on sheets of limestone.

#### **General Description**

- Low dense spiky sedge to 15 cm high.
- Leaf blades: cylindrical, more or less channelled; smooth, rigid, pungent tips, erect, to 7 cm by 0.5 mm.
- Flowers: a small spike-like branched cluster, much shorter and almost concealed by the leaves, pale brown.
- Fruit: a dark brown spike.



- *Gahnia halmaturina*: A closely related species (also a KI endemic), but a much taller, clumping plant growing on creek margins, less dense, with floppy leaves.
- *Gahnia trifida*: much taller, clumping, less dense, with floppy leaves.
- Schoenus breviculmis which forms similar mounds but has much smaller leaves which are less prickly.



#### KANGAROO ISLAND SPIKY SAW-SEDGE (Gahnia hystrix)



## **Biology/Ecology**

- Flowering between November and January.
- Regenerates from root stock, also germinates readily from seed, after fire.
- Does not need fire to regenerate. Observed to regenerate well despite no fire for 52 years.
- Its microhabitat in limestones means many plants escape fire.
- Seedlings are drought tolerant.

Habitat loss or disturbance could

## Habitat

Coastal low open shrubland in shallow soils over limestone. Usually grows in pockets of sand in the sheet limestone, near sea cliffs, under very open low Eucalyptus diversifolia mallee.

## Distribution

Endemic to Kangaroo Island, confined to the south, west and north coasts.



# **Further information**

threaten this plant.

**Threats** 

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html

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# **Prickly Grevillea**

# (Grevillea halmaturina ssp. halmaturina)

This plant is only found on Kangaroo Island and has a conservation status of Vulnerable in South Australia. Its species and subspecies name '*Halmaturina*' means 'Kangaroo' from the Greek *'Halme*' (= leap/bound), often applied to K.I. endemic species.

#### **General Description**

- Spiny-leaved shrub 0.5-2 m high
- **Branchlets:** fine, downy hairs closely pressed to the surface, older branchlets with a prominent hairless rib and each leaf base closely attached for several nodes.
- Leaves: widely spreading, dense, rigid, linear, up to 3 cm X 1 mm, almost hairless; upper side 2 lateral veins and a mid-vein often dividing into 3; lower side with 2 persistently silky densely hairy narrow grooves between the curved back margins and midrib; long, straight, sharp tips.
- Flower: clusters evenly spread along the end of the branch; at the tip of branchlets or short axis shoots; flattish clusters of 7-16 flowers.
- Fruit: slightly curved, elliptical, 12-13 mm long, smooth, blackish, hairless, on a long slender stalk, usually with a thin curved appendage from the tip.

## Do not confuse it with:

• *Persoonia juniperina* has similar shaped leaves but yellow flowers.



#### PRICKLY GREVILLEA (Grevillea halmaturina spp. halmaturina)





#### **Biology/Ecology**

- Flowering between August and December.
- Germinates from seed after fire.
- Persists under a broad range of fire frequencies.
- Seedlings are tolerant to drought.

#### Habitat

Grows in the west on the banks of rivers and lower slopes of river valleys, on sand under Eucalyptus cladocaylx woodland. In the east it grows in loamy depressions subject to waterlogging, under E. cneorifolia, E. diversifolia, and E. cosmophylla open mallee.

#### Distribution

Endemic to Kangaroo Island, where it occurs on the western plateau, inland from the north coast, to the west and south of Kingscote, and on Dudley Peninsula.



#### Threats

- Roadworks can damage and kill plants found on roadsides if not done carefully.
- Weeds may compete with this species.

#### **Further information**

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# **Rogers' Spider Flower**

(Grevillea lavandulacea ssp. rogersii)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. It's species name mean 'like lavender', referring to the leaves, though this subspecies' foliage is smaller and less grey than other subspecies.

#### **General Description**

- Sprawling shrub 25-60 cm by 40-200 cm; main branchlets with moderately dense coarse white Tshaped hairs, bristles soon breaking away leaving rounded bases; short shoots on most nodes.
- Leaves: accompanied by shoots at the axis; rigid, linear, up to 8 mm by 2.5 mm; upper surface initially with matted hairs, quickly becoming mostly hairless with small bumps, curved-back margins; mid-rib sometimes prominent; lower surface mostly concealed, closely-pressed hairs; apex acute, grading to a very short sharp tip. Note broader juvenile leaves over page.
- Flowers: in roughly flat-topped clusters of 1-4; evenly spaced on short shoots along the stem.
- Fruit: curved, narrowly egg-shaped, c. 12 mm long; short closely pressed hairs with some long, raised hairs; on a <1 cm long stalk; with an erect appendage at the tip.

#### Do not confuse it with:

 Grevillea muricata, which is only found at the eastern end of KI, SE of Kingscote. Grevillea lavandulacea ssp. rogersii has white tips to the petals unlike G. muricata that has all red petals.



## ROGER'S SPIDER FLOWER (Grevillea lavandulacea ssp. rogersii)





## Biology/Ecology

- Flowers October to November.
- Germinates from seed after fire, but persists under a broad range of fire frequencies.
- Seedlings are tolerant to drought.

#### Threats

- Weeds such as Tasmanian blue gum threaten to outcompete the species at some sites.
- The species may be susceptible to the root mould Phytophthora cinnamomi.
- Roadworks can damage and kill plants found on roadsides if not done carefully.

#### **Further information**

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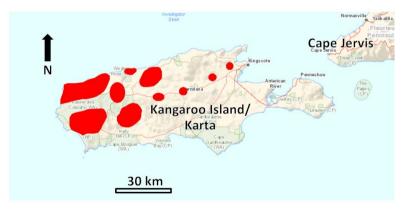


Juvenile (above right, R. Davies) note the broad leaves.

Occurs on sandy loams, sometimes with laterite, quartzite cobbles or outcropping quartzite, on the slopes of river valleys. Often under *Eucalyptus cladocalyx* woodland or *E. cosmophylla* low open woodland, with a very sparse understorey.

#### Distribution

Endemic to Kangaroo Island, where it is confined to the northern and western parts.





# Enigma Hakea

(Hakea aenigma)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. It was first described in 1985, and its name (aenigma) means "riddle" in Latin, as it doesn't produce any viable seeds or fruit and only reproduces via suckers.

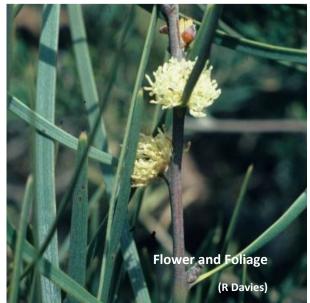
#### **General Description**

- Compact shrub to 2.5 m high; upward-pointing smooth branches; suckers from a lignotuber; a horizontal root system.
- **Branchlets:** with closely pressed matted hairs, persisting at least until flowering, sometimes patchy grey.
- Leaves: pointing upwards, flat, narrow-linear, to 35 cm by 3-10 mm, quickly becoming hairless, often twisted at the base; lengthwise veins, 1-6 above, 4-9 below; short sharp tip 0.7-1.5 mm long.
- Flower bud: egg-shaped, conical, 6-10 mm long; apex and margins of leaf-like bracts white, hairy.
- Flower: clusters evenly dispersed along the stem; 16-33 cream-white flowers per cluster.

#### Biology/Ecology

- Re-sprouts from basal shoots and suckers after a fire.
- Flowers from September to November, but reportedly does not produce viable seed. Reproduces via suckers.

- *Hakea mitchellii:* taller; leaves generally triangular in cross-section and concave above.
- Other species of Hakea that have cylindrical, needle-like leaves.



#### ENIGMA HAKEA (Hakea aenigma)



#### **Threats**

- The species' restricted distribution and clonal reproduction, makes it potentially vulnerable to decline from diseases or disturbance events.
- Weeds such as Tasmanian blue gum and radiata pine threatened to outcompete the species at some sites
- The root mould *Phytophthora cinnamomi* is reportedly a significant threat.
- Roadworks can damage and kill roadsides plants if not done carefully.

#### Habitat

Occurs on crests and gentle upper ridge slopes of plateaux, on acidic iron-rich soils.

Usually grows under *Eucalyptus remota* mallee/very open mallee, often with *E. baxteri*.

#### Distribution

Endemic to Kangaroo Island, confined to the north-west.



#### **Further information**

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e-sprouting

basal shoot (M. Bennell)



# **Kangaroo Island Cress**

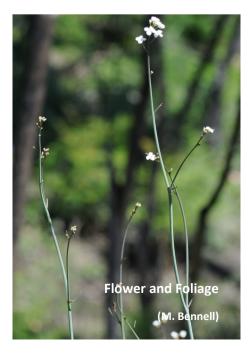
(Irenepharsus phasmatodes)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. This species is favoured by fire, quickly regenerating and then dying off. Comically, its name comes from a taxonomic problem, combining Greek names for 'peace' (*irene*) and 'piece' (*pharsos*).

## **General Description**

- Erect annual or biennial plant to 90 cm tall.
- Basal leaves: in a rosette, deeply lobed along the leaf rib.
- **Stems:** hairless, sparingly branched; stem leaves sparse, stalkless, to 6 cm long, linear, smooth margins.
- Flowers: in clusters on branchlets spread along the stem; sepals
  ~2 mm long; 4 petals ~4 mm long, white; style <1 mm long.</li>
- Fruit: brown cylindrical pod, to 22 mm by 1.5 mm; stalks halfspreading, to 10 mm long; seeds oblong, to 1.2 mm long.

- Weeds in the Cruciferae family such as *Sisymbrium* or *Brassica* species.
- You can tell *Irenepharsus phasmatodes* from similar plants by their tall, branched, hairless, wiry stems with narrow leaves, wide leaves being only at ground level.



#### KANGAROO ISLAND CRESS (Irenepharsus phasmatodes)







#### Habitat

Occurs on sandy clay-loam soils on the slopes and bases of consolidated dunes, under Eucalyptus diversifolia open mallee with sparse yakka in the understory.

#### Threats

- Infrequent fire: This species responds well to fire, will decline if not burnt regularly.
- Roadworks can damage and kill plants found on roadsides if not done carefully.

# Biology/Ecology

- Flowering between November and February.
- Only germinates after fire.
- Rapidly produces flowers and fruit, dying off after one year (or two years at the most).

#### Distribution

Endemic to Kangaroo Island, confined to the western half of the Island.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



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# Saddle-leaf Phebalium

(Leionema equestre)

This plant is only found on Kangaroo Island and is Endangered both nationally and in South Australia. The genus name comes from a tiny botanical feature on its seed (in Greek *'leios'* = smooth and *'nema'* = thread). The plant's saddle shaped leaf is also included in its name, *'equester'* = cavalry in Latin.

#### **General Description**

- Dwarf spreading shrub to 30 cm high with repeatedly diverging branches.
- **Branchlets**: slender, smooth, green or becoming reddish, fine downy star-shaped hairs.
- Leaves: on very short stems, spreading, saddleshaped, oblong, heart-shaped, to 3.5 mm by 1.5 mm, dotted with depressed glands, rough above, no hairs below, curved downwards.
- Flowers: white to pink, 1 to 3 in a terminal cluster.
- Fruit: pale brown, warty two segmented capsule to 3 mm long.

#### Do not confuse it with:

 Prostanthera serpyllifolia: Has a similar appearance when young and not in flower, but leaves are glossy and aromatic.



#### SADDLE-LEAF PHEBALIUM (Leionema equestre)





#### Threats

- Infrequent fire: species responds well to fire, will decline if not burnt regularly.
- Habitat fragmentation causes loss of connectivity; small populations risk losing genetic diversity.
- Vegetation clearance can cause reduction or loss of populations.
- Weeds like bridal creeper, perennial veldt grass and Phalaris compete with the species at some sites.
- **Browsing:** Seedlings are very palatable and need protection from wallabies, especially when regenerating after fire.
- Roadworks can damage and kill plants found on roadsides if not done carefully.

#### Biology/Ecology

- Flowers from August to October.
- Germinates from seed after fire or disturbance.

#### Habitat

On sands and loamy sands sometimes with ironstone gravel. Usually in open *Eucalyptus diversifolia* mallee, sometimes with E. cneorifolia or E. cosmophylla, except near north coast where it is in Eucalyptus cladocalyx woodland. Often occurs where there are Melaleuca uncinata shrubs.

#### Distribution

Endemic to Kangaroo Island, confined to a very small area.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html

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# Kangaroo Island Logania

(Loganis insularis)

This plant is only found on Kangaroo Island and has a conservation status of Vulnerable both nationally and in South Australia. Male and female plants are separate, and the plant is named after James Logan, a botanist who studied plant sexuality. *'Insularis'* means growing on Islands in Latin.

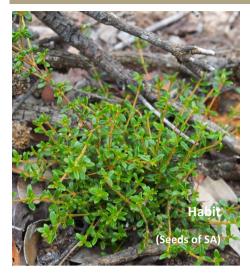
#### **General Description**

- Small erect shrub to 30 cm high, separate male and female plants, stems minutely hairy.
- Leaves: elliptic, sometimes narrower at the base, 8 mm by 3 mm, scattered hairs, margins curved backwards, stalk either absent or short to 2.5 mm long.
- Flowers: in short few-flowered clusters, either male or female, white/cream to pale-yellow.

- Micranthium demissum: occurs with L. insularis in places, but has leaves in threes.
- Logania ovata or L. scabrella may superficially resemble L. insularis when very small seedlings, but have distinctive foliage and/or habit.



#### KANGAROO ISLAND LOGANIA (Logania insularis)





#### Habitat

Coastal open mallee or low shrubland on sandy soil overlying calcrete.

#### **Threats**

- Too frequent fires: germinates well after fire but seedlings are slow growing so will decline if there is not enough time between fires for plants to mature and set sufficient seed.
- The highly-restricted distribution of this species leaves it susceptible to disturbance events.
- Roadworks can damage and kill plants found on roadsides if not done carefully.

## Biology/Ecology

- Flowers between September and November.
- Germinates well from seed after fire.
- Mature plants are able to persist in long unburnt vegetation.

#### Distribution

Endemic to Kangaroo Island, confined to the north-western tip near Cape Borda.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



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Australian Government



# Rough Logania

(Logania scabrella)

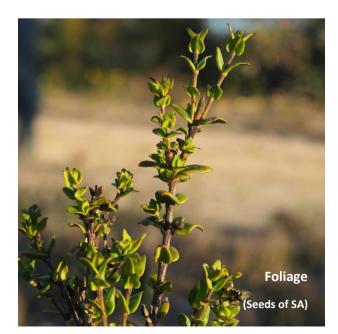
This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. Similarly to the Kangaroo Island Logania, this species has separate male and female plants. Its name comes from the hairy covering, making it feel slightly rough ('*scaber*' = rough to the touch, in Latin).

#### **General Description**

- Erect shrub to 1 m high, separate male and female plants.
- **Branches:** almost cylindrical, often with two lateral ridges, densely and minutely hairy.
- Leaves: elliptical, to 18 mm by 8 mm; base rounded to slightly triangular; margin slightly curved back; often with a few hairs near base; apex blunt; lower surface hairless.
- Flower heads: a cluster of ~7 tiny, white, male or female flowers at the tip of the stem.
- Fruit: orange-brown egg-shaped capsule to 5 mm by 3.5 mm.

#### Do not confuse it with:

 Logania ovata: branchlets hairless or minutely bumpy; leaves elliptical but generally longer and broader; flower heads in clusters of more than 10.



#### ROUGH LOGANIA (Logania scabrella)



#### Habitat

*Eucalyptus remota* low mallee over heath shrubland, on sandy loam to clayey soils, with ironstone gravel.

#### **Threats**

- Too frequent fires: Germinates well after fire but seedlings are slow growing, so will decline if not enough time between fires for plants to mature and set sufficient seed.
- Climate change: Hot dry summers following fire events will reduce seedling establishment.
- Vegetation clearance for firebreaks will cause reduction or loss of populations if not done carefully.
- Weeds such as Tasmanian blue gum compete with the species at some sites.
- The root mould *Phytophthora cinnamomi* could affect co-habiting species and habitat.

#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html

















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## Biology/Ecology

- Flowers between August and October.
- Adults are killed by fire, only regenerates from seed.

dling

- High seed viability after fire, seedlings grow slowly.
- Can regenerate after fire, in long unburnt vegetation (longest observed was 65 years between fires).

#### Distribution

Endemic to Kangaroo Island, restricted to the western half of the Island, where it is scattered in distribution.





# Kangaroo Island Platysace (Platysace heterophylla var. tepperi)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. Its name *Platysace* ("plat-ee-say-see") means 'broad shield' in Greek, referring to the fruit, whilst *heterophylla* means different leaved, probably referring to the variation in number of lobes (points).

#### **General Description**

- Hairless perennial herb (non-woody) or semi-shrub; stems slender, 10 - 30 cm long, ascending.
- Leaves: triangular, 5 10 mm long, mostly acutely 3-lobed.
- Flowers: stalks very slender, 1-2.5 cm long; at the stem tip; in clusters rounded or flat-topped, small, composed of 1 – 5 smaller few-flowered clusters; bracts (leaves at the base of the flower) short, in a whorl, narrow and tapering.



- *Platysace heterophylla* var. *heterophylla:* narrow-linear to thread-like leaves, 10-20 mm long, which are flat on one side, convex on the other.
- Trachymene pilosa: similar foliage, but with spreading hairs on leaves and branchlets.
- Note: Jusaitis (1993) notes there is a morphological gradient of leaf length, width, shape and plant habit, from the typical var. *tepperi* form near Cape Borda in the west of KI, grading to Hog Bay Road in the east of KI.

#### KANGAROO ISLAND PLATYSACE (Platysace heterophylla var. tepperi)



Habitat In the west of Kangaroo Island: coastal low mallee. shrublands and heath in sandy soils over calcareous

rocky outcrops.



In the east of Kangaroo Island: in deep sandy soils, often at the base of eucalypt trees.

# Adult and Flowers (R. Davies)

#### Biology/Ecology

- Successful seedling recruitment after a fire.
- Seems to persist under a broad range of fire frequencies.

#### Distribution

Endemic to Kangaroo Island. Plants most typical of this variety occur near Cape Borda in the West. Plants on eastern Kangaroo Island are atypical intergrades between Platysace heterophylla var. tepperi and P. heterophylla var. heterophylla.



• **Roadworks** can damage and kill plants on roadsides if not done carefully.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



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# **Tepper's Trigger Plant**

(Stylidium tepperianum)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. Trigger plants use a unique method of pollination. A visiting insect triggers a club-shaped 'column', which strikes the insect and deposits pollen. The foliage is the best way to identify this tiny plant.

#### **General Description**

- Perennial plant, up to 10 cm tall when flowering; stems lying flat, more or less branched, with dense tufted rosettes of leaves at the nodes and occasional secondary roots.
- Branches: reddish brown, hairless.
- Leaves: stemless, narrow, tapering to a point (sometimes worn off), 5 - 9 mm by 1 mm, margins regular but sometimes with stout fine hairs or short serrations, convex above, a swollen raised main vein, backwards-curved margins below, hairless (except occasionally on margins).
- **Capsule:** narrow, like an inverted cone, 5 7 mm long, splits open along the whole length; seeds elliptical, vertically ridged.
- Flowers: white to pink with a red stripe on the reverse; 1 to a few per loosely-branched stalk, 1 flower per branch; stalk 2 6 cm long; 2 leaf-like linear-triangular bracts 1-3 mm long below the flower; petal-like sepals 2-3 mm long; tiny petals with the tube shorter than the sepals.

#### Do not confuse it with:

 Other Stylidium species: Flowers of other trigger-plant species are very similar; however the foliage of *S. tepperianum* is distinctive.



#### TEPPER'S TRIGGER PLANT (Stylidium tepperianum)





#### Habitat

Stylidium tepperianum occurs on sands and sandy clay loams in close proximity to sheet limestone outcrops on undulating plains and hills.

Associated vegetation is *Eucalyptus* diversifolia mallee to very low open mallee, over mid-dense to very sparse understoreys dominated by Melaleuca lanceolata or Hakea vittata.

#### **Biology/Ecology**

- Despite habitat being widespread, distribution is very patchy. •
- Regenerates readily from seed following fire.
- Persists under a broad range of fire frequencies.
- Occurrence in limestone pockets enables some mature plant to survive fire.
- Runoff from adjacent sheet limestone enables seedlings to survive periods of low rainfall.

#### Distribution

Endemic to Kangaroo Island, mostly the western and southern parts of the Island.



#### Threats

• Potentially threatened by climate **change:** hot dry summers following bushfires could decimate seedling recruitment.

#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



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# Pink Zieria

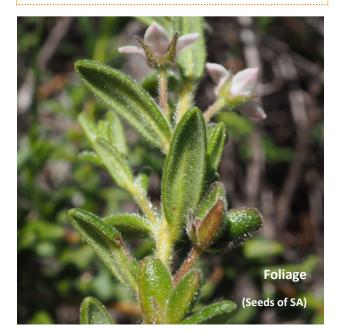
# (Zieria veronicea ssp. insularis)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. The name 'insularis' (= 'of an island' in Latin) refers to the subspecies' restricted distribution on KI. This lemon-scented plant is a member of the citrus family.

#### **General Description**

- Small lemon-scented shrub to 0.6 m high.
- **Branchlets:** dense star-like, silky hairs; older branches slightly greyish; bark wrinkled to corky.
- Leaves: usually single, opposing on the stem, stalkless or on extremely short stalks; blade oblong, 5-16 mm by 1-6 mm; paler on underside, velvety, especially on underside; margin smooth, curved or rolled back; apex obtuse.
- Flowers: in 1-3, generally shorter than the leaves; stalks 0.4-14 mm long, densely star-like hairs; bracts either scale-like and minute or distinctly leaflike, 1-7 mm long; outer floral lobes acute, dense star-like hairs; 4 or rarely 5 petals, 2-7 mm long; pale-pink or occasionally white.

- *Boronia edwardsii* which has leaves in threes.
- *Philotheca pungens* and *P. linearis* which have prickly-tipped or narrow leaves, and five petals.



#### PINK ZIERIA (Zieria veronicea ssp. insularis)





#### Habitat

Occurs on sandy loam on plains and plateau crests subject to seasonal waterlogging. Towards the western edge of its range, it occurs in woodlands and low woodland dominated by various combinations of *Eucalyptus cosmophylla*, *E. baxteri*, *E. remota* and/or *E. diversifolia*.

#### Threats

- Roadworks can damage and kill plants found on roadsides if not done carefully.
- Weeds such as Tasmanian blue gum could threaten to outcompete with the species at some sites.
- Has been found near to infestations of the introduced pathogenic root mould
   Phytophthora cinnamomi but it is not known if it is susceptible to this disease.

## Biology/Ecology

- Flowers mostly in winter and spring but can flower any time of year after rain.
- Germinates from seed after a fire, but persists under a broad range of fire frequencies.
- Seedlings have some degree of drought tolerance.

#### Distribution

This subspecies is endemic to Kangaroo Island, where it occurs at the western end of the island, and the area between Nepean Bay and Murray Lagoon.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



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# **Rogers' Spider Flower**

(Grevillea lavandulacea ssp. rogersii)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. It's species name mean 'like lavender', referring to the leaves, though this subspecies' foliage is smaller and less grey than other subspecies.

#### **General Description**

- Sprawling shrub 25-60 cm by 40-200 cm; main branchlets with moderately dense coarse white Tshaped hairs, bristles soon breaking away leaving rounded bases; short shoots on most nodes.
- Leaves: accompanied by shoots at the axis; rigid, linear, up to 8 mm by 2.5 mm; upper surface initially with matted hairs, quickly becoming mostly hairless with small bumps, curved-back margins; mid-rib sometimes prominent; lower surface mostly concealed, closely-pressed hairs; apex acute, grading to a very short sharp tip. Note broader juvenile leaves over page.
- Flowers: in roughly flat-topped clusters of 1-4; evenly spaced on short shoots along the stem.
- Fruit: curved, narrowly egg-shaped, c. 12 mm long; short closely pressed hairs with some long, raised hairs; on a <1 cm long stalk; with an erect appendage at the tip.

#### Do not confuse it with:

 Grevillea muricata, which is only found at the eastern end of KI, SE of Kingscote. Grevillea lavandulacea ssp. rogersii has white tips to the petals unlike G. muricata that has all red petals.



## ROGER'S SPIDER FLOWER (Grevillea lavandulacea ssp. rogersii)





## Biology/Ecology

- Flowers October to November.
- Germinates from seed after fire, but persists under a broad range of fire frequencies.
- Seedlings are tolerant to drought.

#### Threats

- Weeds such as Tasmanian blue gum threaten to outcompete the species at some sites.
- The species may be susceptible to the root mould Phytophthora cinnamomi.
- Roadworks can damage and kill plants found on roadsides if not done carefully.

#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html

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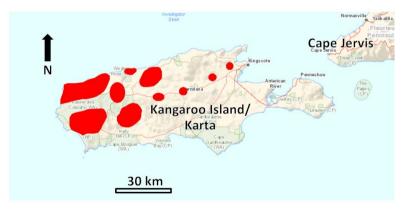


Juvenile (above right, R. Davies) note the broad leaves.

Occurs on sandy loams, sometimes with laterite, quartzite cobbles or outcropping quartzite, on the slopes of river valleys. Often under *Eucalyptus cladocalyx* woodland or *E. cosmophylla* low open woodland, with a very sparse understorey.

#### Distribution

Endemic to Kangaroo Island, where it is confined to the northern and western parts.





# Enigma Hakea

(Hakea aenigma)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. It was first described in 1985, and its name (aenigma) means "riddle" in Latin, as it doesn't produce any viable seeds or fruit and only reproduces via suckers.

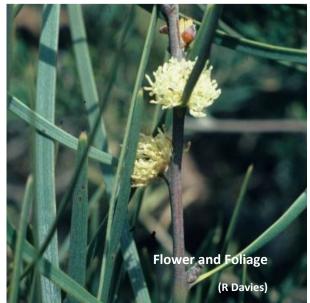
#### **General Description**

- Compact shrub to 2.5 m high; upward-pointing smooth branches; suckers from a lignotuber; a horizontal root system.
- **Branchlets:** with closely pressed matted hairs, persisting at least until flowering, sometimes patchy grey.
- Leaves: pointing upwards, flat, narrow-linear, to 35 cm by 3-10 mm, quickly becoming hairless, often twisted at the base; lengthwise veins, 1-6 above, 4-9 below; short sharp tip 0.7-1.5 mm long.
- Flower bud: egg-shaped, conical, 6-10 mm long; apex and margins of leaf-like bracts white, hairy.
- Flower: clusters evenly dispersed along the stem; 16-33 cream-white flowers per cluster.

#### Biology/Ecology

- Re-sprouts from basal shoots and suckers after a fire.
- Flowers from September to November, but reportedly does not produce viable seed. Reproduces via suckers.

- *Hakea mitchellii:* taller; leaves generally triangular in cross-section and concave above.
- Other species of Hakea that have cylindrical, needle-like leaves.



#### ENIGMA HAKEA (Hakea aenigma)



#### **Threats**

- The species' restricted distribution and clonal reproduction, makes it potentially vulnerable to decline from diseases or disturbance events.
- Weeds such as Tasmanian blue gum and radiata pine threatened to outcompete the species at some sites
- The root mould *Phytophthora cinnamomi* is reportedly a significant threat.
- Roadworks can damage and kill roadsides plants if not done carefully.

#### Habitat

Occurs on crests and gentle upper ridge slopes of plateaux, on acidic iron-rich soils.

Usually grows under *Eucalyptus remota* mallee/very open mallee, often with *E. baxteri*.

#### Distribution

Endemic to Kangaroo Island, confined to the north-west.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html

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e-sprouting

basal shoot (M. Bennell)



# **Kangaroo Island Cress**

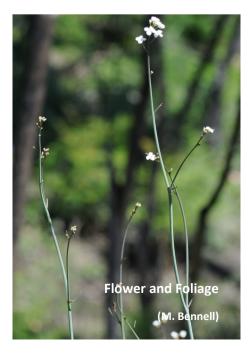
(Irenepharsus phasmatodes)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. This species is favoured by fire, quickly regenerating and then dying off. Comically, its name comes from a taxonomic problem, combining Greek names for 'peace' (*irene*) and 'piece' (*pharsos*).

## **General Description**

- Erect annual or biennial plant to 90 cm tall.
- Basal leaves: in a rosette, deeply lobed along the leaf rib.
- **Stems:** hairless, sparingly branched; stem leaves sparse, stalkless, to 6 cm long, linear, smooth margins.
- Flowers: in clusters on branchlets spread along the stem; sepals
  ~2 mm long; 4 petals ~4 mm long, white; style <1 mm long.</li>
- Fruit: brown cylindrical pod, to 22 mm by 1.5 mm; stalks halfspreading, to 10 mm long; seeds oblong, to 1.2 mm long.

- Weeds in the Cruciferae family such as *Sisymbrium* or *Brassica* species.
- You can tell *Irenepharsus phasmatodes* from similar plants by their tall, branched, hairless, wiry stems with narrow leaves, wide leaves being only at ground level.



#### KANGAROO ISLAND CRESS (Irenepharsus phasmatodes)







#### Habitat

Occurs on sandy clay-loam soils on the slopes and bases of consolidated dunes, under Eucalyptus diversifolia open mallee with sparse yakka in the understory.

#### Threats

- Infrequent fire: This species responds well to fire, will decline if not burnt regularly.
- Roadworks can damage and kill plants found on roadsides if not done carefully.

# Biology/Ecology

- Flowering between November and February.
- Only germinates after fire.
- Rapidly produces flowers and fruit, dying off after one year (or two years at the most).

#### Distribution

Endemic to Kangaroo Island, confined to the western half of the Island.



#### **Further information**

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# Saddle-leaf Phebalium

(Leionema equestre)

This plant is only found on Kangaroo Island and is Endangered both nationally and in South Australia. The genus name comes from a tiny botanical feature on its seed (in Greek *'leios'* = smooth and *'nema'* = thread). The plant's saddle shaped leaf is also included in its name, *'equester'* = cavalry in Latin.

#### **General Description**

- Dwarf spreading shrub to 30 cm high with repeatedly diverging branches.
- **Branchlets**: slender, smooth, green or becoming reddish, fine downy star-shaped hairs.
- Leaves: on very short stems, spreading, saddleshaped, oblong, heart-shaped, to 3.5 mm by 1.5 mm, dotted with depressed glands, rough above, no hairs below, curved downwards.
- Flowers: white to pink, 1 to 3 in a terminal cluster.
- Fruit: pale brown, warty two segmented capsule to 3 mm long.

#### Do not confuse it with:

 Prostanthera serpyllifolia: Has a similar appearance when young and not in flower, but leaves are glossy and aromatic.



#### SADDLE-LEAF PHEBALIUM (Leionema equestre)





#### Threats

- Infrequent fire: species responds well to fire, will decline if not burnt regularly.
- Habitat fragmentation causes loss of connectivity; small populations risk losing genetic diversity.
- Vegetation clearance can cause reduction or loss of populations.
- Weeds like bridal creeper, perennial veldt grass and Phalaris compete with the species at some sites.
- **Browsing:** Seedlings are very palatable and need protection from wallabies, especially when regenerating after fire.
- Roadworks can damage and kill plants found on roadsides if not done carefully.

#### Biology/Ecology

- Flowers from August to October.
- Germinates from seed after fire or disturbance.

#### Habitat

On sands and loamy sands sometimes with ironstone gravel. Usually in open *Eucalyptus diversifolia* mallee, sometimes with E. cneorifolia or E. cosmophylla, except near north coast where it is in Eucalyptus cladocalyx woodland. Often occurs where there are Melaleuca uncinata shrubs.

#### Distribution

Endemic to Kangaroo Island, confined to a very small area.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html

Nature Conservation Society of South Australia

















# Kangaroo Island Logania

(Loganis insularis)

This plant is only found on Kangaroo Island and has a conservation status of Vulnerable both nationally and in South Australia. Male and female plants are separate, and the plant is named after James Logan, a botanist who studied plant sexuality. *'Insularis'* means growing on Islands in Latin.

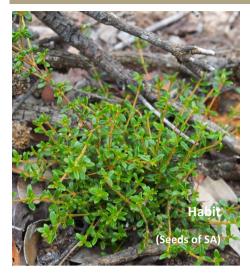
#### **General Description**

- Small erect shrub to 30 cm high, separate male and female plants, stems minutely hairy.
- Leaves: elliptic, sometimes narrower at the base, 8 mm by 3 mm, scattered hairs, margins curved backwards, stalk either absent or short to 2.5 mm long.
- Flowers: in short few-flowered clusters, either male or female, white/cream to pale-yellow.

- Micranthium demissum: occurs with L. insularis in places, but has leaves in threes.
- Logania ovata or L. scabrella may superficially resemble L. insularis when very small seedlings, but have distinctive foliage and/or habit.



#### KANGAROO ISLAND LOGANIA (Logania insularis)





#### Habitat

Coastal open mallee or low shrubland on sandy soil overlying calcrete.

#### **Threats**

- Too frequent fires: germinates well after fire but seedlings are slow growing so will decline if there is not enough time between fires for plants to mature and set sufficient seed.
- The highly-restricted distribution of this species leaves it susceptible to disturbance events.
- Roadworks can damage and kill plants found on roadsides if not done carefully.

## Biology/Ecology

- Flowers between September and November.
- Germinates well from seed after fire.
- Mature plants are able to persist in long unburnt vegetation.

#### Distribution

Endemic to Kangaroo Island, confined to the north-western tip near Cape Borda.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



These fact sheets were produced by the Nature Conservation Society of South Australia's project **Mobilising and supporting a community-led fire recovery initiative for Kangaroo Islands' threatened flora.** This Landcare funded project is a partnership with Friends of Parks Western KI, The Biological Society of South Australia, The SA Seed Conservation Centre, Landscapes KI, and Firesticks Alliance. Produced in April 2022.















Australian Government



# Rough Logania

(Logania scabrella)

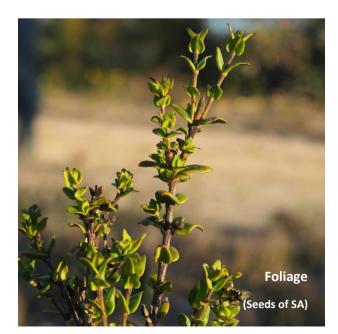
This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. Similarly to the Kangaroo Island Logania, this species has separate male and female plants. Its name comes from the hairy covering, making it feel slightly rough ('*scaber*' = rough to the touch, in Latin).

#### **General Description**

- Erect shrub to 1 m high, separate male and female plants.
- **Branches:** almost cylindrical, often with two lateral ridges, densely and minutely hairy.
- Leaves: elliptical, to 18 mm by 8 mm; base rounded to slightly triangular; margin slightly curved back; often with a few hairs near base; apex blunt; lower surface hairless.
- Flower heads: a cluster of ~7 tiny, white, male or female flowers at the tip of the stem.
- Fruit: orange-brown egg-shaped capsule to 5 mm by 3.5 mm.

#### Do not confuse it with:

 Logania ovata: branchlets hairless or minutely bumpy; leaves elliptical but generally longer and broader; flower heads in clusters of more than 10.



#### ROUGH LOGANIA (Logania scabrella)



#### Habitat

*Eucalyptus remota* low mallee over heath shrubland, on sandy loam to clayey soils, with ironstone gravel.

#### **Threats**

- Too frequent fires: Germinates well after fire but seedlings are slow growing, so will decline if not enough time between fires for plants to mature and set sufficient seed.
- Climate change: Hot dry summers following fire events will reduce seedling establishment.
- Vegetation clearance for firebreaks will cause reduction or loss of populations if not done carefully.
- Weeds such as Tasmanian blue gum compete with the species at some sites.
- The root mould *Phytophthora cinnamomi* could affect co-habiting species and habitat.

#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html

















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## Biology/Ecology

- Flowers between August and October.
- Adults are killed by fire, only regenerates from seed.

dling

- High seed viability after fire, seedlings grow slowly.
- Can regenerate after fire, in long unburnt vegetation (longest observed was 65 years between fires).

#### Distribution

Endemic to Kangaroo Island, restricted to the western half of the Island, where it is scattered in distribution.





# Kangaroo Island Platysace (Platysace heterophylla var. tepperi)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. Its name *Platysace* ("plat-ee-say-see") means 'broad shield' in Greek, referring to the fruit, whilst *heterophylla* means different leaved, probably referring to the variation in number of lobes (points).

#### **General Description**

- Hairless perennial herb (non-woody) or semi-shrub; stems slender, 10 - 30 cm long, ascending.
- Leaves: triangular, 5 10 mm long, mostly acutely 3-lobed.
- Flowers: stalks very slender, 1-2.5 cm long; at the stem tip; in clusters rounded or flat-topped, small, composed of 1 5 smaller few-flowered clusters; bracts (leaves at the base of the flower) short, in a whorl, narrow and tapering.



- *Platysace heterophylla* var. *heterophylla:* narrow-linear to thread-like leaves, 10-20 mm long, which are flat on one side, convex on the other.
- Trachymene pilosa: similar foliage, but with spreading hairs on leaves and branchlets.
- Note: Jusaitis (1993) notes there is a morphological gradient of leaf length, width, shape and plant habit, from the typical var. *tepperi* form near Cape Borda in the west of KI, grading to Hog Bay Road in the east of KI.

#### KANGAROO ISLAND PLATYSACE (Platysace heterophylla var. tepperi)



Habitat In the west of Kangaroo Island: coastal low mallee. shrublands and heath in sandy soils over calcareous

rocky outcrops.



In the east of Kangaroo Island: in deep sandy soils, often at the base of eucalypt trees.

# Adult and Flowers (R. Davies)

#### Biology/Ecology

- Successful seedling recruitment after a fire.
- Seems to persist under a broad range of fire frequencies.

#### Distribution

Endemic to Kangaroo Island. Plants most typical of this variety occur near Cape Borda in the West. Plants on eastern Kangaroo Island are atypical intergrades between Platysace heterophylla var. tepperi and P. heterophylla var. heterophylla.



• **Roadworks** can damage and kill plants on roadsides if not done carefully.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



















# **Tepper's Trigger Plant**

(Stylidium tepperianum)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. Trigger plants use a unique method of pollination. A visiting insect triggers a club-shaped 'column', which strikes the insect and deposits pollen. The foliage is the best way to identify this tiny plant.

#### **General Description**

- Perennial plant, up to 10 cm tall when flowering; stems lying flat, more or less branched, with dense tufted rosettes of leaves at the nodes and occasional secondary roots.
- Branches: reddish brown, hairless.
- Leaves: stemless, narrow, tapering to a point (sometimes worn off), 5 - 9 mm by 1 mm, margins regular but sometimes with stout fine hairs or short serrations, convex above, a swollen raised main vein, backwards-curved margins below, hairless (except occasionally on margins).
- **Capsule:** narrow, like an inverted cone, 5 7 mm long, splits open along the whole length; seeds elliptical, vertically ridged.
- Flowers: white to pink with a red stripe on the reverse; 1 to a few per loosely-branched stalk, 1 flower per branch; stalk 2 6 cm long; 2 leaf-like linear-triangular bracts 1-3 mm long below the flower; petal-like sepals 2-3 mm long; tiny petals with the tube shorter than the sepals.

#### Do not confuse it with:

 Other Stylidium species: Flowers of other trigger-plant species are very similar; however the foliage of *S. tepperianum* is distinctive.



#### TEPPER'S TRIGGER PLANT (Stylidium tepperianum)





#### Habitat

Stylidium tepperianum occurs on sands and sandy clay loams in close proximity to sheet limestone outcrops on undulating plains and hills.

Associated vegetation is *Eucalyptus diversifolia* mallee to very low open mallee, over mid-dense to very sparse understoreys dominated by *Melaleuca lanceolata* or *Hakea vittata*.

#### **Biology/Ecology**

- Despite habitat being widespread, distribution is very patchy.
- Regenerates readily from seed following fire.
- Persists under a broad range of fire frequencies.
- Occurrence in limestone pockets enables some mature plant to survive fire.
- Runoff from adjacent sheet limestone enables seedlings to survive periods of low rainfall.

#### Distribution

Endemic to Kangaroo Island, mostly the western and southern parts of the Island.



#### Threats

 Potentially threatened by climate change: hot dry summers following bushfires could decimate seedling recruitment.

#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html



















# Pink Zieria

# (Zieria veronicea ssp. insularis)

This plant is only found on Kangaroo Island and has a conservation status of Rare in South Australia. The name 'insularis' (= 'of an island' in Latin) refers to the subspecies' restricted distribution on KI. This lemon-scented plant is a member of the citrus family.

#### **General Description**

- Small lemon-scented shrub to 0.6 m high.
- **Branchlets:** dense star-like, silky hairs; older branches slightly greyish; bark wrinkled to corky.
- Leaves: usually single, opposing on the stem, stalkless or on extremely short stalks; blade oblong, 5-16 mm by 1-6 mm; paler on underside, velvety, especially on underside; margin smooth, curved or rolled back; apex obtuse.
- Flowers: in 1-3, generally shorter than the leaves; stalks 0.4-14 mm long, densely star-like hairs; bracts either scale-like and minute or distinctly leaflike, 1-7 mm long; outer floral lobes acute, dense star-like hairs; 4 or rarely 5 petals, 2-7 mm long; pale-pink or occasionally white.

- *Boronia edwardsii* which has leaves in threes.
- *Philotheca pungens* and *P. linearis* which have prickly-tipped or narrow leaves, and five petals.



#### PINK ZIERIA (Zieria veronicea ssp. insularis)





#### Habitat

Occurs on sandy loam on plains and plateau crests subject to seasonal waterlogging. Towards the western edge of its range, it occurs in woodlands and low woodland dominated by various combinations of Eucalyptus cosmophylla, E. baxteri, E. remota and/or E. diversifolia.

#### Threats

- Roadworks can damage and kill plants found on roadsides if not done carefully.
- Weeds such as Tasmanian blue gum could threaten to outcompete with the species at some sites.
- Has been found near to infestations of the introduced pathogenic root mould Phytophthora cinnamomi but it is not known if it is susceptible to this disease.

## **Biology/Ecology**

- Flowers mostly in winter and spring but can flower any time of year after rain.
- Germinates from seed after a fire, but persists under a broad range of fire frequencies.
- Seedlings have some degree of drought tolerance.

#### Distribution

This subspecies is endemic to Kangaroo Island, where it occurs at the western end of the island, and the area between Nepean Bay and Murray Lagoon.



#### **Further information**

Nature Conservation Society of SA: www.ncssa.asn.au Landscape SA, Kangaroo Island: www.landscape.sa.gov.au/ki/ Seed Conservation Centre, SA: spapps.environment.sa.gov.au/seedsofsa/ Plants of Kangaroo Island: http://www.syzygium.xyz/saplants/index\_KI.html















