

### **Toad Rush**

### Juncus bufonius

### General Description:

Small narrow-leaved rush, 2-39cm tall, often quite short and grass-like. The leaves are thin, straight and channelled. There are a lot of stems with flowerheads. These are branched with small clusters of individual flowers. Flowers in spring to early summer.

#### **Further Details:**

Annual rush with slender stems. The flowers are pale to rusty brown in colour. A leafy bract (leaf-like structure) partly encloses the flowerhead.

#### Soils:

Found growing in a range of soils from sands to clay loams and clays.

#### ▶ Habitat and Notes:

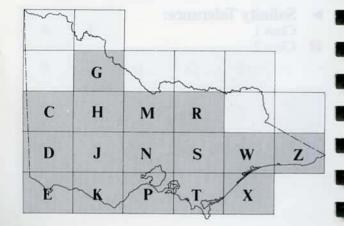
Has a distinct preference for moist soils and is usually found near permanent water or at least periodic flooding for part of the year, for example next to the margins of swamps or drainage lines. Not very competitive. Autumn and winter growing species. It is tolerant of slightly saline soils particularly when rainfall

### **▶** Salinity Tolerance:

has leached out topsoil salt.

Class 1





### Streaked Arrow Grass

Triglochin striata

### **▶** General Description:

Rush-like plant, green or brownish in colour. Leaves are 10-20cm long narrow cylindrical and hairless. Numerous small round green flowers on a central stem which varies in height from 3-30cm.

#### Further Details:

Perennial. Leaves and stems grow from stolons (stems along or below ground). Individual flowers have short stalks. The fruit are about 3mm by 2mm.

#### ► Soils:

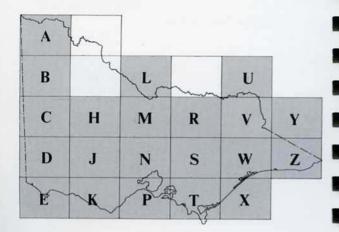
Loams, clay loams and clay. Rarely on sandy soils.

#### ► Habitat and Notes:

Frequently found in salt marshes and coastal areas. Also found in wet open areas throughout Southern Victoria. (Does not appear to grow in the Mallee or in the Alps.) Prefers damp, water-logged situations, usually in the margins of ponds and lagoons.

### Salinity Tolerance:





### **Buck's Horn Plantain**

### Plantago coronopus

**▶** General Description:

Low growing rosetted plant with distinctively shaped leaves. Narrow cylindrical flowerhead at the end of a stalk. Flowers mainly during spring and summer but can flower throughout the year.

#### **▶** Further Details:

Perennial plant with leaves arising from a rosette base. The leaves are lobed or toothed and they can be hairless or hairy (sometimes velvety). The tiny flowers are in a cylindrical spike up to 10cm long, at the end of a hairy stalk.

#### Soils:

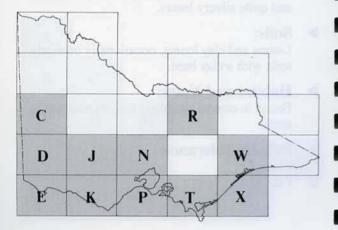
Survives in many soil types from sandy through to loams and clays. Can tolerate water-logging for part of the year.

#### ► Habitat and Notes:

Generally found in more settled areas but can colonize disturbed areas, especially where there is higher rainfall. Grows in the cooler months and often dies off in the summer. Browsed by livestock. In areas of heavy grazing it may form tiny plants. This species is a good indicator of saline soils. In soils of low salinity it exhibits a dull, grey-green colouration compared to its normal colouration in non-saline soils. In highly saline soils it has a red colour.

### Salinity Tolerance:





## Salt Angianthus

(Common Cup Flower)

### Angianthus preissianus

### **General Description:**

Distinctive grey-green erect plant up to 40cm high. Stems and leaves are covered in soft cottony hairs. The leaves are narrow and club shaped. The flowerheads are yellow or reddish, made up of many tiny flowers. They are surrounded by dense white hairs.

### **Further Details:**

Annual dwarf shrub. Leaves are very hairy, narrow and linear in shape, ending in a short sharp point. One or several stems. Small dome-shaped flowerheads with narrow flower bracts which bend backwards.

### Soils:

Occurs in a range of soil types from sands to clay loams.

#### **Habitat and Notes:**

Often grows in sandy soils subject to periodic water-logging. Found in saltpans, saline marshes and coastal areas.

### **Salinity Tolerance:**



















































### **Strawberry Clover**

### Trifolium fragiferum

**▶** General Description:

Typical clover with a group of 3 leaflets held at the end of a leaf stalk. Rather narrow, pointed oval-shaped leaflets. Round pinkish flowers made up of numerous tiny individual flowers (florets). Flowers in spring and summer.

#### **▶** Further Details:

Low, spreading perennial. Trifoliate (leaves are in groups of 3 leaflets) with leaflet stalks of equal length. Variable markings on leaves (black, brown or white; specks in crescents). Veining on leaflets is arched and branched. Leaf edges may be toothed. Sometimes there are a few hairs on leaf under-surface and stalks. The flowers often have a ring of fresh florets (with the outer ones dying and the central ones not opened yet). After flowering the calyx (outer part of flowers) swells up giving the cluster a strawberry-like appearance which is cream with rusty coloured bits (dried petals).

#### > Soils:

Loams and clays.

#### Habitat and Notes:

Found in pastures and grassland. Able to withstand conditions which are too wet, too dry, too alkaline or too saline for white clover. Difficult to establish but persists well under heavy grazing once established.

### Salinity Tolerance:



### Swamp Weed

### Selliera radicans

**▶** General Description:

Fleshy hairless creeping plant. Spoon-shaped, bright green leaves, up to 10cm long. Pale fan-like flowers, 6-8mm long, grey-purplish on the outside. Flowering mainly in summer.

#### Further Details:

Perennial. Arises from underground stems (rhizomes) singly or in groups, often looks as if individual leaves are growing out of the ground.

> Soils:

Sandy, loams, clay soils. Frequently in damp to water logged depressions.

► Habitat and Notes:

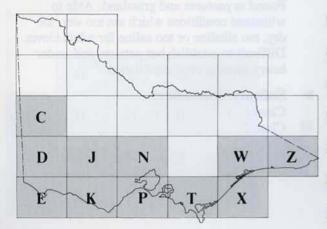
Found in salt marshes. It is a good indicator of soils which may be water-logged and saline.

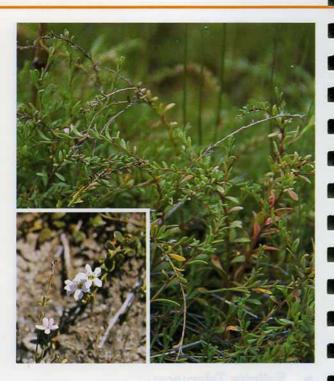
► Salinity Tolerance:

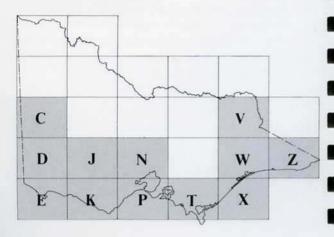
Class 1

Class 2

### **Distribution** map







### Creeping Brookweed

Samolus repens

► General Description:

An upright or trailing hairless plant up to 20cm tall. Numerous stems arising from creeping root stocks. Leaves are pointed oval in shape. Flowers relatively large and conspicuous up to 1cm wide, white to very pale pink.

**▶** Further Details:

Smooth, multi-stemmed plant growing from creeping stems (stolons). Leaves are oval, elliptical or spathulate (see diagrams), pointed, and glossy in appearance. They are arranged alternately. Flowers are grouped onto a central stalk with the youngest flowers at the top of this stalk.

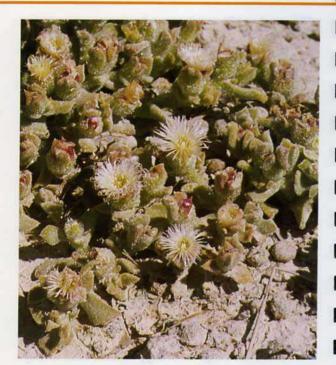
► Soils:

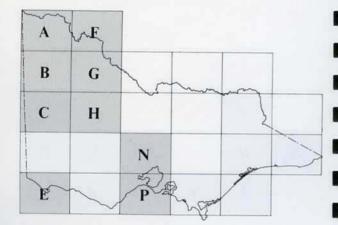
In a wide range of soil types from sand to clay loams to clays, prefers sands.

▶ Habitat and Notes:

Found in salt flats, salt marshes and coastal flats. Prefers wet and damp localities.

**▶** Salinity Tolerance:





### **Ice Plant**

### Mesembryanthemum crystallinum

**▶** General Description:

Low-growing succulent. Angular heart-shaped leaves covered with sparkling wart-like glands. Parts of the plant are often red in colour. The flowers are white with several rows of very thin petals. Flowers in spring and early summer.

► Further Details:

Annual or biennial. Bottom leaves are larger, 6-12cm long with a stem-clasping base. The other leaves on the stems are 2-4cm. On the flower stems the leaves are arranged alternately but on the other stems they are opposite. The fruit capsule has five sections and is up to 12mm wide.

► Soils:

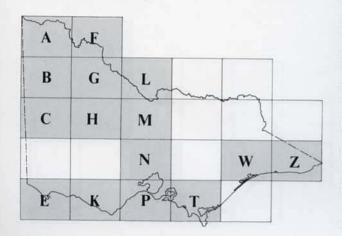
Prefers sands, sandy loams and loams, usually well drained.

► Habitat and Notes:

Occurs along roadsides, plains and hillsides. Grows best in years with high winter and spring rainfall. Rarely grazed by livestock.

Salinity Tolerance:





### **Ruby Salt Bush**

(Barrier Salt Bush, Plum Puddings, Barry Cotton Bush)

### Enchylaena tomentosa

**▶** General Description:

A semi-succulent, much-branched shrub, up to nearly 1m tall. Leaves and stems are covered with hairs (a more woolly type of hair on the stems). Leaves are short cylindrical, rounded and fleshy. Small flowers on stems near leaves. Fruits are rounded, fleshy and tomato-shaped, ripening to red or yellow. Flowering in spring to early summer.

#### Further Details:

Perennial shrub. Leaves are 6-15mm long and have a velvety surface. Flowers are small and solitary, held in the leaf axils (where leaf joins stem). Succulent fruits which are yellow to red when ripe.

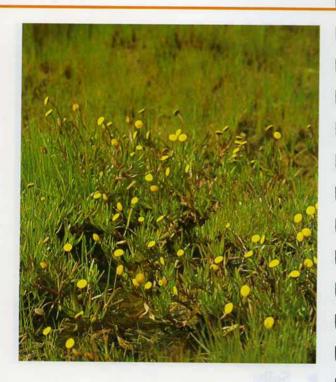
#### Soils:

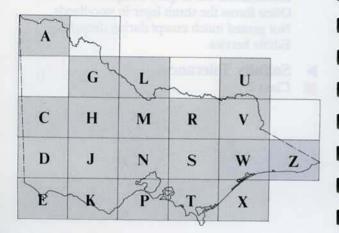
Grows in a wide range of soil types. Most often found in well drained sandy soils.

#### ► Habitat and Notes:

A hardy shrub, resistant to drought and frost. Not normally a dominant plant in saline communities but is quite conspicuous. Often forms the shrub layer in woodlands. Not grazed much except during droughts. Edible berries.

### **▶** Salinity Tolerance:





### **Water Buttons**

### Cotula coronopifolia

**▶** General Description:

Low growing, spreading herb. Leaves and stems are semi-succulent. The leaves are usually jagged but sometimes smooth-edged. Flowerheads are small yellow, and button-like. Flowers in winter and spring.

#### **▶** Further Details:

Hairless perennial growing from stolons (runners/horizontal stems). Leaves are spearhead-shaped (lanceolate) or broadly oblong, up to 5cm long. The leaf edges are smooth, lobed or jagged (incised), with a base which is clasping or enclosing the stem. Flowerheads are yellow, dome-shaped, without petals, and with rings of oblong bracts (outer parts of flower) in 2 rows.

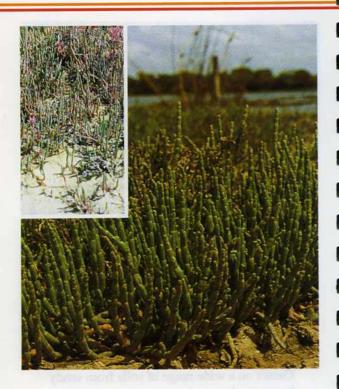
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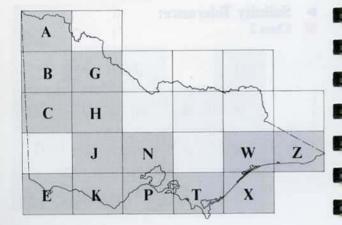
Grows on a wide range of soils from sandy loams to clays.

#### ► Habitat and Notes:

Restricted to wet soils, or soils that are periodically flooded. Exists in moderately saline, waterlogged soils, and may form large mats over shallow water.

### **▶** Salinity Tolerance:





### **Beaded Glasswort**

### Sarcocornia quinqueflora

### General Description:

Fleshy leafless succulent, which can grow up to 50cm tall but is usually much shorter. Stems are sprawling to erect, made of many segments each up to 2cm long. Flowers are inconspicuous in the shorter more rounded segments at the end of the stems. Fruiting bodies are cone-like structures about 8mm long.

### **▶** Further Details:

Succulent perennial. Stems are cylindrical, segmented and fleshy. The segment joints are slightly V-shaped. Flowers are enclosed in the stems with yellow anthers (holding pollen) sticking out of tiry slits. New growth continues beyond the flowers so that the cones usually occur on the side of the stems. The stems are woody when they dry out.

Beaded Glasswort is very similar to Thick-Headed Glasswort (*S. blackiana*). Beaded Glasswort is usually smaller and more slender. It has 5-9 flowers per spike and slightly hooked hairs on the seed. (*S. blackiana* has thicker flowers with 5-13 flowers per spike and shorter rounded hairs on the seeds.)

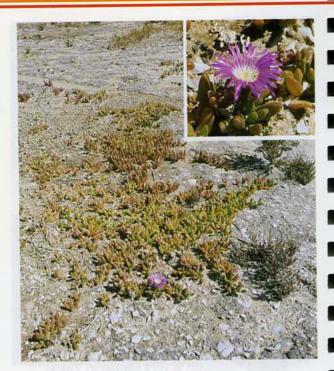
#### > Soils:

Found in a range of soil types from sands through loams to clay but prefers clays.

#### ► Habitat and Notes:

Common in southern Victoria. Found around salt lakes in coastal areas, and in salt marshes, salt flats and dry saltpans.

### **▶** Salinity Tolerance:



# Rounded Noonflower (Round-Leaf Pigface)

### Disphyma crassifolium

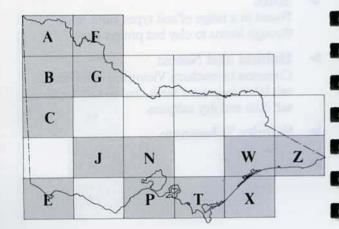
### **▶** General Description:

Succulent with more or less cylindrical leaves growing in clusters (or in opposite pairs) on a horizontal creeping stem. Flowers are pink or purple with numerous linear petals. Flowers in spring and summer.

#### **▶** Further Details:

Perennial. The leaves are 2-5cm long and 4-6mm thick with a pointed tip. The inwardsfacing sides of the leaves are often slightly flattened. The leaves sometimes have a reddish-yellow tinge. The horizontal stems are rooted at the nodes. Flowers are about 3cm in diameter when open. (The flowers usually close at night and do not open again until late morning.) The fruit capsule is red to light brown, in colour and has 5 membranous flaps which open at the top when ripe. It surrounded/overgrown by small leaf-like structures about 15mm long.

### Distribution map



### Soils:

Wide range of soils, especially grey clays.

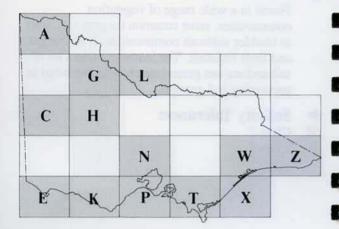
#### ► Habitat and Notes:

Found in a wide range of vegetation communities, most common on grey clay soils in bladder saltbush communities. It is drought and frost resistant. The leaves contain a lot of salt and are not grazed much. Can be useful in preventing soil erosion.

### Salinity Tolerance:

Class 2





### Sea Blite

### Suaeda australis

**▶** General Description:

Straggly shrub which can grow up to 1m tall but is usually only about 20cm tall. Small narrow succulent leaves on long upright stems and branches. Leaves are light green or purplish-red. Long thin spikes or branches bearing the small flowers and later the round fruit. Flowers in summer and autumn.

**▶** Further Details:

Alternate succulent leaves, 1-3cm long. Small stalkless flowers in clusters in the leaf axils (where leaf joins the stem), forming slender leafy spikes at the ends of the branches. The spikes are often more than half the length of the branch. Fruiting body is round and flattened, 1-2mm long, with 5 succulent lobes closing over the seed.

► Soils:

Usually saline clay soils.

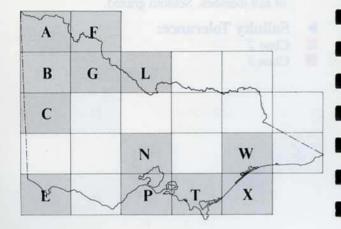
► Habitat and Notes:

Found in saline situations. Along drainage areas and on the edge of temporary lakes, once the water level has dropped. Common in irrigation-induced saline areas. A widespread undershrub of salt marshes. Seldom grazed.

**▶** Salinity Tolerance:

Class 2





## Samphire

(Halosarcia)

### Halosarcia pergranulata

**▶** General Description:

A dense succulent shrub with numerous woody stems and short segmented branchlets. No leaves as such present. Can grow up to 1m tall but is often quite a low-growing plant. Flowers and fruiting bodies are not very obvious. Flowers in spring to early summer.

**▶** Further Details:

Short branchlets made up of small segments, 1-3mm long (sometimes look like a row of beads). Both the flowers and the fruiting bodies are succulent; they are in spikes up to 5cm long, at the ends of the branches.

**▶** Soils:

Loams to heavy clays.

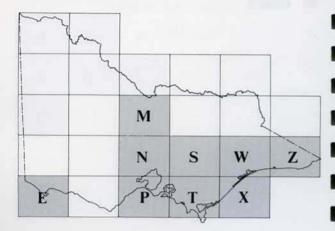
► Habitat and Notes:

Found in coastal areas, drainage lines and around salt lakes. It is sometimes found as short red plants in very saline areas.

H. pergranulata is the most common Halosarcia in Victoria.

Salinity Tolerance:





## Swamp Paper-Bark

### Melaleuca ericifolia

### **▶** General Description:

Small to medium-sized tree up to 9m tall. Delicate foliage with numerous fine branchlets and short needle-like leaves. The leaves are dark green except for the lighter new growth. The bark on the older trees is light brown cracked and peeling. Creamy white flowers clustered in spikes with leafy shoots at the ends. Flowers mainly in spring.

#### **▶** Further Details:

Alternate leaves, 1-2cm long, which are often curved at the tip. Flowerheads made up of numerous individual flowers clustered along a central stalk up to 2.5cm long. The most obvious parts of the flowers are the long stamens.

#### ► Soils:

Sandy to loamy soils, can exist in dry to waterlogged soils in coastal regions.

#### ▶ Habitat and Notes:

Occurs in low level to highly saline soils. Found along creek and river flats in the cooler regions of Victoria. Used to be very common in thickets and swamp-forests before land clearance and drainage. The young straight stems have been much used for brushwood fencing. An aromatic oil in the leaves has been used for dental and medical antiseptic preparations and in scented soaps.

### Salinity Tolerance: