

## Ruby saltbush

### Scientific name(s)

*Enchylaena tomentosa*

### Strengths

- Adaptation to a wide variety of soil types
- Drought tolerant
- Easy to establish

### Limitations

- Sensitive to overgrazing
- Inadequate as a sole feed source
- Low waterlogging tolerance

### Plant description

**Plant:** Ruby saltbush is a low-growing, shrub. A height of 1 m is occasionally attained and it will grow up through neighbouring plants. However, plants are often less than half this size and some forms are prostrate.

**Stems:** Branches may grow to a metre or more long.

**Leaves:** Cylindrical, semi-succulent and up to 2 cm long, are covered with fine white hairs.

**Fruit:** These are very showy, small (5 mm diameter) fruits which are anywhere from red to orange when ripe. The fruits are succulent and change from green to yellow prior to ripening.

**Seeds:** Black.

### Pasture type and use

Ruby saltbush is a very common native plant, occurring through most of southern and central Australia. It commonly occurs under trees. It has been used to a limited extent as a saltland forage shrub species.

### Where it grows

#### Rainfall

Ruby saltbush is likely to grow in areas receiving as little as 275mm average annual rainfall.

#### Soils

Ruby saltbush is adapted to an extremely wide variety of soils. Naturally, it can be found over a wide range of poor soils from coastal, partially stabilised, dune sands near the Southern Ocean in South Australia, to riverine clay loams, often in saline depressions, and to the deep siliceous, sandy soils in many semi-arid regions of the continent.

#### Temperature

Ruby saltbush is able to withstand periods of frost well. It is also able to tolerate dry, hot conditions.

### Establishment

#### Companion species

Grasses: Winter annuals will provide useful feed with minimal competitive effects. Perennial grass species in lower rainfall regions will most likely reduce ruby saltbush growth.

Legumes: Winter growing annuals such as medics and clovers will provide additional winter feed.

Shrubs: Sometimes a mixture of different shrub species has been sown in the past. There is currently research being done on the value of planting a range of species together in the hope of alleviating the nutritional limitations of species and increasing animal intake and performance.

### **Sowing/planting rates as single species**

Best results with direct seeding for other saltbush species have been obtained using a niche seeder. The viability of ruby saltbush seed is usually better than other saltbushes but it is beneficial to test the viability of the seed that is to be used before seeding. It has been recommended to place enough viable seeds to allow for 50 seeds per placement. Establishment of ruby saltbush can also be achieved using established seedlings. These can be planted either by hand or with mechanical tree planters. Contract planters can plant seedlings and numerous organisations have planters which can be hired to landholders. Many different layouts and densities can be used depending on the situation, but generally shrubs have been planted as dense stands or in alleys or belts. Machinery access, establishment costs, salinity status and understorey companion species are all factors to consider in designing a shrub system layout.

Note: Establishment of shrub species is a critical step in obtaining productive stands. A number of factors are vital in ensuring establishment success. It is recommended to obtain further information on establishing shrubs from the sources listed at the end of this factsheet.

### **Sowing/planting rates in mixtures**

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### **Sowing time**

Ruby saltbush is best sown soon after the break of season.

### **Inoculation**

Not applicable.

### **Fertiliser**

Soil tests should be conducted to determine the baseline nutrient status before application to gauge whether a fertiliser response is likely.

## **Management**

### **Maintenance fertiliser**

There is little information available on the benefits of regular fertilisation. However, it is likely that fertilisation would be beneficial especially to the companion pasture species.

### **Grazing/cutting**

Ruby saltbush is sensitive to overgrazing and thus adequate grazing management is critical to its success. Short, heavy grazing with long periods (6 months) of recovery are probably the best management methods to ensure ruby saltbush survival.

### **Seed production**

Ruby saltbush can produce large quantities of seed.

### **Ability to spread**

As the succulent berries of ruby saltbush are eaten by birds, these also serve to disperse seeds far from the parent plants. Ruby saltbush is often seen under trees and other roost sites. This coupled with its high seed production means ruby saltbush does have the ability to spread.

### **Weed potential**

Ruby saltbush is native to a large portion of southern and central Australia. It is likely to establish and spread at low densities once introduced. Native populations of ruby saltbush

could be at risk of genetic contamination if new provenances are introduced.

### **Major pests**

Ruby saltbush is known to host numerous insects, both pest and beneficial. However, serious insect damage is rarely seen.

### **Major diseases**

There are no known major diseases that affect ruby saltbush.

### **Herbicide susceptibility**

There is very little information regarding the herbicide susceptibility of ruby saltbush. Caution should be followed using herbicides with this species.

## **Animal production**

### **Feeding value**

Limited evidence suggests that ruby saltbush is a maintenance feed and is insufficient for animals with a high feed demand when used as a sole feed source.

### **Palatability**

Whilst palatability varies, ruby saltbush is generally more palatable than most saltbushes.

### **Production potential**

Ruby saltbush should be viewed as a plant that may offer some potential in a mix to provide feed when other more nutritious forages are absent (e.g. late summer). Supplementing with grain or good quality hay is necessary to achieve increased animal production.

### **Livestock disorders/toxicity**

Ruby saltbush can contain high levels of oxalates. However, cases of animal poisoning have not been reported.

## **Cultivars**

There are no ruby saltbush cultivars. It may be worthwhile obtaining a local provenance as it should be well adapted to your local area. It is generally easily obtained from most nurseries and revegetation specialists.

## **Further information**

'Saltland pastures for South Australia' by Craig Liddicoat and Jock McFarlane, Rural Solutions, SA.

## **Acknowledgements**

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## **Author and date**

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