



Puccinellia

What is puccinellia?

Puccinellia (*Puccinellia ciliata*) is a perennial grass that is very salt and waterlogging tolerant. The plant has long narrow leaves, grows mid autumn to spring and matures early summer. Puccinellia is excellent stock feed and is superior to tall wheat grass.

Where does puccinellia grow?

Puccinellia is best suited to saline areas with a shallow watertable and where rainfall is more than 350 mm. It will grow in areas covered by sea barley grass and where the soil has become bare.

Productivity

Typical pastures produce 2 to 3 tonnes of dry matter per hectare per year (3 to 4 DSE/ha equivalent). With appropriate management and application of fertiliser, yields up to 8 tonnes per ha have been produced.



Site preparation

Fence the area to be sown. If waterlogging is a problem install shallow drains where practical to remove excess water. Diversion banks will reduce the movement of runoff water onto the area. Consideration should be given to the disposal of drainage water.

Weeds such as sea barley grass must be controlled. Best results are obtained by chemical topping the previous spring. Other options include burning, knockdown herbicide and cultivation. Use a combination of methods.

Cultivate in early autumn and leave as ridged or rough as possible particularly where soil salinity is high. The ridges allow better leaching of salt and provides young seedlings some protection from waterlogging.

Sowing

Drop seed on the soil surface. Avoid harrowing. A light rolling may benefit establishment in some soils but should be avoided where prolonged waterlogging is likely.

Sow in autumn after the opening rains. If the site is likely to become untrafficable after rains, dry sowing should be considered. In higher rainfall areas (above 475 mm) sowing in late winter to early spring has given promising results. Seed rate: 6 to 10 kg/ha. Use the higher rate where salinity is more severe. Cost: up to \$5.00 per kg.

Pests

Monitor and control red legged earth mite during establishment.

Fertiliser

If the site has poor fertiliser history or has been eroded, apply 100 to 150 kg/ha of superphosphate or equivalent at sowing. Nitrogen fertiliser in autumn/winter will boost productivity. Apply 20 to 50 units of N per ha (about 40 to 100 kg/ha of urea). For more information, refer to the PIRSA fact sheet entitled "Puccinellia fertiliser requirements".

Grazing

Allow about 18 months for plants to establish before grazing. Most economic benefit is gained if puccinellia is used to fill the autumn feed gap reducing the reliance on supplementary feeding. Established puccinellia will tolerate hard grazing, but should be allowed to mature and set seed at least every two to three years.

The digestibility of puccinellia is relatively stable (average 50% or greater digestible dry matter) and provides graziers with high quality dead pasture during autumn. Crude protein levels vary from around 4% of dry matter (autumn) to greater than 15% in winter.

Mixed pastures

Puccinellia can be sown as part of a mix with tall wheat grass (10 kg/ha) and clover (strawberry and balansae). Mixed pastures such as this also complement saltbush that has been established on saltland, adding considerably to the total grazing value of the stand.

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