



Photographs: *Austrodanthonia* species - Chris Penfold (top left), Mary Retallack (all other photos)

Wallaby grass	<i>Austrodanthonia</i> species
Wallaby grass species commonly used in vineyards	Common wallaby grass <i>Austrodanthonia caespitosa</i> (white top); Wallaby grass <i>Austrodanthonia racemosa</i> ; Brown back wallaby grass <i>Austrodanthonia duttoniana</i> ; Wallaby grass (LIG 179) <i>Austrodanthonia fulva</i> ; Small flower wallaby grass <i>Austrodanthonia setacea</i> ; Purplish wallaby grass <i>Austrodanthonia tenuior</i> .
Overview	With about 33 different species, 14 of them in SA, wallaby grass is a widespread and valuable species due to its persistence and productivity. They are seldom monocultures; multiple species often grow adjacent to each other.
Description	Erect tufted perennials with fine leaves, which remain green throughout the year. Variable seed heads, but are usually about 0.1–0.8 metres above the ground and have an attractive white fluffy top when mature.
Key features	Known for its distinctively white tufted seed heads. A range of different wallaby grasses has been successfully established in the mid-rows of vineyards from seed.
Height	30 to 80cm tall.
Flowering time	Spring and sometimes in autumn, depending on the climate.
Fuel load	Minimal fuel load.
Response to fertiliser	Increases in frequency in response to fertiliser. Most <i>Austrodanthonia</i> species respond positively to nitrogen.
Frost tolerance	High tolerance.
Drought tolerance	High tolerance.
Weed suppression	Mature stands of wallaby grass are very effective at suppressing wireweed or caltrop.
C₃ photosynthetic pathway	Winter active C ₃ grass. Most wallaby grasses prefer not to be waterlogged.
Distribution	Australia-wide as well as south-east Asia and New Zealand.
References	<i>Native Grasses for Sustainable Land Management</i> . Native Grass Resources Group Inc, Mt Barker, SA. Waters, C., Whalley, W., & Huxtable, C. (2002) <i>Grassed up - guidelines for revegetating with Australian native grasses</i> . NSW Ag.





Weeping rice-grass	<i>Microlaena stipoides</i> var. <i>stipoides</i>
Alternative name	Weeping grass, meadow rice grass or rice grass.
Overview	A tufted perennial with a creeping rhizome, it remains green throughout the year and is a highly competitive species. It is more commonly seen in damp or semi-shaded areas.
Description	Characterised by slender weeping seed stalks and short non-adventurous (underground runner) root system. A year round green perennial grass, which can be spread by dividing clumps and replanting. Often found around rocky areas (which trap water) on south-facing slopes. Resilient, low maintenance ground cover that provides good protection to soil from heavy traffic and water erosion.
Key features	The seed stalks have a distinctive arching /weeping appearance.
Height	30 to 70cm (to top of seed head). The growth habit is quite variable, from prostrate to erect.
Flowering time	Summer to autumn.
Fuel load	Minimal fuel load.
Response to fertiliser	Responds well to increased soil fertility.
Salt tolerance	Medium salt tolerance.
Frost tolerance	High frost tolerance.
Drought tolerance	High drought tolerance.
C₃ photosynthetic pathway	Winter active C ₃ grass. High tolerance to acid soils, drought and frost. Growth may be impaired by excessive exposure to radiant heat. Warm season establishing grass (growth spurts in spring and autumn).
References	<i>Fact sheet: Weeping Rice Grass</i> . Native Grass Resources Group Inc, Mt Barker, SA. <i>Fact sheet: Native Grasses for Sustainable Land Management</i> . Native Grass Resources Group Inc, Mt Barker, SA. Waters, C., Whalley, W., and Huxtable, C. (2002) <i>Grassed up - guidelines for revegetating with Australian native grasses</i> . NSW Ag.





Spear grass	<i>Austrostipa</i> species
Overview	Spear grasses are a year-long green, course-leaved perennial. With about 39 different species in SA, spear grasses are widespread.
Description	Leaves are rough to touch and are covered in minute hairs.
Key features	The seed has a long sharp awn with a corkscrew twist (up to 6cm long). The leaves are tightly scrolled.
Height	0.1 to 1m.
Flowering time	Summer, summer and autumn.
Fuel load	Minimal dry fuel load, year long green foliage.
Response to fertiliser	Decreases in frequency.
Frost tolerance	Moderate to high tolerance.
Drought tolerance	High drought tolerance.
C₃ photosynthetic pathway	C ₃ winter active grass.
Distribution	Occurs Australia-wide, as well as south-east Asia and New Zealand.
References	<i>Fact sheet: Native Grasses for Sustainable Land Management.</i> Native Grass Resources Group Inc, Mt Barker, SA. <i>Species Information Sheet: Landscaping – which native grasses to grow.</i> Native Grass Resources Group Inc, Mt Barker, SA.





Kangaroo grass	<i>Themeda triandra</i>
Overview	This tall, large tussock grass is one of Australia's most widespread species. A drought resistant, deep-rooted, warm season perennial.
Description	The leaves are up to 50cm long and the leaf blades bear sparse hairs. Seed heads are relatively large, and often reddish in colour with a drooping appearance. Older leaves tend to have a red/brown appearance.
Key features	Distinctive rusty-red coloured ripe seed heads and a red/brown tinge on the older foliage. Often found regenerating in shallow soils. Common on roadsides near the freeway entry at Hahndorf.
Height	Upright foliage 40 to 90cm.
Flowering time	Flowering often occurs throughout summer from December to late April, but can occur in all months.
Fuel load	Moderate. If not removed, accumulated dry leaf matter can give rise to a significant bank of very flammable material, but spring / summer mowing or burning results in a summer persistent green sward.
Response to fertiliser	Decreases in frequency.
Frost tolerance	Low to moderate.
Drought tolerance	High drought tolerance.
C₄ photosynthetic pathway	Being a C ₄ summer active grass, <i>Themeda triandra</i> will only respond to warm temperatures with adequate soil moisture for seed germination. Plants tend to be dormant in winter.
Distribution	One of the most widespread native grasses in Australia growing in every state and territory.
References	<i>Fact sheets: Kangaroo Grass and Native Grasses for Sustainable Land Management.</i> Native Grass Resources Group Inc, Mt Barker, SA. Waters, C., Whalley, W., and Huxtable, C. (2002) <i>Grassed up - guidelines for revegetating with Australian native grasses.</i> NSW Ag.





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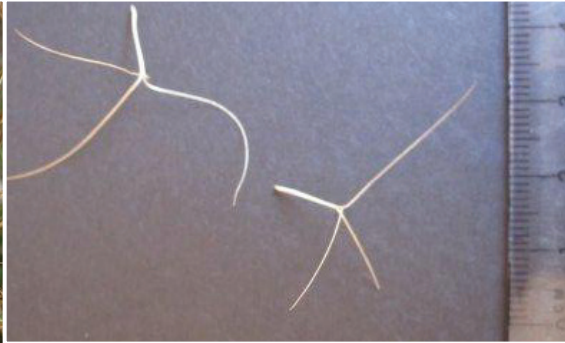
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Photographs: *Chloris truncata* - Mary Retallack

Windmill grass	<i>Chloris truncata</i>
Overview	Windmill grass is a relatively short-lived (2–3 years) perennial and makes rapid growth in spring and early summer. It may persist as an annual, regenerating from seed in spring and summer. The plants are low and tussocky, with blue-green leaves and reddish-purple seed heads.
Description	Distinguished by a seed head with 5–10 radiating spikes each to about 15 cm long radiating horizontally from a common point at the end of the stem. Leaves basal, to 14 cm long, flat or folded, bluish-green in colour.
Key features	Inflorescences resemble a windmill of radiating spikes at the end of each stem.
Height	Plants are usually 10 to 50 cm high.
Flowering time	Mainly summer but may extend into autumn.
Fuel load	Minimal.
Response to fertiliser	Increases in frequency.
Frost tolerance	Low tolerance.
Drought tolerance	Moderate tolerance.
C₄ photosynthetic pathway	Many C ₄ grasses are susceptible to frosts and plants tend to be dormant in winter. C ₄ plants are better adapted to high temperatures, high light intensities and low carbon dioxide concentration when compared to C ₃ plants. They tend to have a low tolerance to water logging and salinity.
Distribution	Widespread in all mainland States. Valuable warm-season grass, either scattered or dominant providing green forage when little else is available. Germinates after spring or summer rainfall.
References	<i>Fact sheet: Native Grasses for Sustainable Land Management</i> . Native Grass Resources Group Inc, Mt Barker, SA. Waters, C., Whalley, W., and Huxtable, C. (2002) <i>Grassed up - guidelines for revegetating with Australian native grasses</i> . NSW Ag.





Brush wiregrass	<i>Aristida behriana</i>
Overview	Brush wire-grass is an attractive warm season perennial, which grows as a low, dense tussock, with coarse, narrow leaves. Usually found on poor shallow soils.
Description	Short tufted perennial, forming sparse clumps, leaves rolled, stems erect and rigid, with brush-like inflorescences, often purplish in colour.
Key features	Juvenile inflorescences look like a green brush with purple tips. Bristly and cream when ripe. Seed heads are dense and brush like, turning light a golden straw colour when mature. Each flower has a three awned seed.
Height	20 to 40cm.
Flowering time	Flowers mainly in spring, but can flower at all times during the year.
Fuel load	Minimal.
Response to fertiliser	Decreases in frequency.
Frost tolerance	Moderate tolerance.
Drought tolerance	High, usually occurs in dry areas.
C₄ photosynthetic pathway	C ₄ summer active grass.
Distribution	Occurs in South Australia, New South Wales and Victoria.
References	<i>Fact sheet: Native Grasses for Sustainable Land Management.</i> Native Grass Resources Group Inc, Mt Barker, SA.

