# Grasses of the Burra Range



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#### Drawings adapted from

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Wheeler DJB, Jacobs SWL, Whalley RDB (2002) 'Grasses of New South Wales (Third Edition).' 3rd. ed. (University of New England: Armidale) <u>http://www.fog.org.au/grasses\_of\_nsw/grasses\_of\_nsw.htm</u>

The species is based on Australia's Virtual Herbarium records (<u>http://avh.ala.org.au</u>) supplemented my own collecting.

# Grasses of the Burra Range

Welcome to the grasses of the Burra Range area. The species covered in this treatment are those found in southern and eastern part of White Mountains National Park area.

The aim of this book is to provide information about common species. The grasses belong to a very widespread and large family called the Poaceae. It is one of the largest flowering plant families of the world, comprising more than 10,000 species. In Australia there are over 1300 species including non-native grasses, in the Burra Range area there are more than 75 species.



#### How to identify a grass

Make sure you have a grass and not a grass-like plant. The chief families that can be easily confused with grasses, and their distinguishing features, are shown in the table.

	Poaceae (grasses)	Cyperaceae (sedges)	Liliaceae sensu lato
Stems	Hollow or solid	Solid	Hollow or solid
	Round	Triangular or round	Round to flat
Leaf sheaths	Open	Closed	Open
Leaves	2-ranked	3-ranked	
Ligules	Present	Absent	Absent
Flowers	Commonly bisexual	Bisexual or unisexual and	Bisexual
	Enclosed by a lemma and	monoecious	petaloid perianth present
	palea and subtended by	Enclosed by a single bract	(often showy)
	sterile glumes	(glume)	
N.B. As with most aspects of the biological world, there are exceptions to these characters			

The grasses have highly modified flowers arranged in a variety of ways. Because they are highly modified and specialized, there are also many new terms used to describe the various features. Hence there is a lot of terminology that chiefly applies to grasses. The basic unit of the grass inflorescence (the flowering part) is the spikelet. The spikelet consists of 1-2 basal glumes (bracts at the base) that subtend 1-many florets or flowers. Each basic floret is enclosed by the male and/or female organs.

#### The Grass Plant



#### Terminology:

- Inflorescence flowers.
- Culm stem.
- Node the part of the stem (usually jointed) from which the leaf arises.
- Ligule a membranous or hairy appendage at the junction between sheath and blade.
- Stolon a trailing stem that produces roots at the nodes.
- Rhizome an underground stem, usually growing horizontally, producing roots at the nodes.

The Grass Spikelet



The key in this book is based mainly on the type of inflorescence, and certain features of the spikelet. Based on similarities of these characters, grass genera are placed in one or more of the nine groups.



#### Group 1

Spatheate inflorescence

Cymbopogon ambiguus

Cymbopogon obtectus

Schizachyrium fragile

Themeda avenacea

Themeda triandra

Cymbopogon bombycinus

#### Grass 2

# Digitate or sub-digitate inflorescence

Alloteropsis cimicina Alloteropsis semialata Bothriochloa decipiens Bothriochloa ewartiana Dichanthium sericeum subsp. sericeum Digitaria breviglumis Digitaria brownii Digitaria ciliaris Digitaria imbricata Eulalia aurea

#### Grass3

#### Spikelets with 3 or more awns per floret

Amphipogon sericeus Aristida benthamii Aristida burraensis Aristida calycina Aristida holathera Aristida inaequiglumis Aristida ingrata Aristida jerichoensis Aristida pruinosa Enneapogon lindleyanus Enneapogon polyphyllus Enneapogon virens

#### Group 4

#### Group 5

Inflorescence contracted

panicles, spikes, and racemes

#### Inflorescence with open branches

Arundinella setosa Chrysopogon fallax Eriachne armitii Eriachne ciliata Sarga plumosum

#### Elytrophorus spicatus Eragrostis (Ectrosia) leporina Eriachne armitii

Sehima nervosum

With 1 or 2 awns

#### Group 7

# Inflorescence with open branches, with obvious secondary branches

Eragrostis basedowii Eragrostis brownii Eragrostis cumingii Eragrostis elongata Eragrostis filicaulis Eragrostis lacunaria Eragrostis pilosa Eragrostis pubescens Eragrostis sororia Eragrostis spartinoides Eragrostis speciosa Eragrostis stenostachya Eragrostis tenellula Eriachne mucronata Eriachne obtusa Panicum decompositum Panicum effusum Panicum mindanaense Panicum simile Panicum trachyrhachis Triodia mitchellii Triodia pungens

#### Group 8 Awns absent or short Inflorescence with open branches, once branched Digitaria ammophila Digitaria diminuta Digitaria hystrichoides Urochloa holosericea subsp. holosericea Urochloa piligera Urochloa mosambicensis

#### Group 6

Spikelets with bristles, long hairs subtending spikelet, spine-like structures present Melinis repens Setaria surgens

#### Group 9

#### Inflorescence appears

unbranched Cleistochloa subjuncea Digitaria gibbosa Eremochloa bimaculata Paspalidium gracile Paspalidium rarum Paspalidium spartellum Thaumastochloa pubescens Tripogonella loliiformis

# Group 1 - Spatheate inflorescence

Inflorescence with leaf-like structures (spathe) present with and/or below each inflorescence (spatheate inflorescence).



#### Key to Genus

1.	Annual to 40 cm tall	Schizachyrium
	Perennial 50 cm or taller	2
2.	Spikelets with silky white hairs	Cymbopogon
	Spikelets not with white hairs	Themeda



# **Cymbopogon** - Lemon-scented Grasses Cymbopogon pronounced sim·bo·PO-gon.

Tufted perennials with aromatic shoots and leaves when crushed. The lemon-scented leaves are distinctive. The clustered spikelets are covered with white hairs.

Cymbopogon bombycinus (Silky Oilgrass)



Perennial erect, 30-120 cm tall. Common in open woodlands. Leaves at the base of the plant usually curved. Occurs on sandy and stony soils along stream banks and in woodlands

Cymbopogon obtectus (Silky-heads)





Perennial erect 50-100 cm tall. Uncommon in open woodlands. The spikelets are deflexed. Leaves at the base of the plant usually NOT curved. Occurs in open woodlands on sandy and stony soils, usually near water courses.

#### Cymbopogon ambiguus (Native Lemon Grass)





Perennial erect, 40-200 cm tall. Uncommon in open woodlands. Leaves at the base of the plant NOT curved. Occurs in various types of woodlands and in grasslands, usually grows near watercourses.

# Themeda

*Themeda* pronounced THEM-ah-da. Tufted perennials with spikelets clustered.



Themeda triandra (Kangaroo Grass)

A perennial, tufted grass, 30-130 cm tall. Occurs in open woodlands.

#### Themeda avenacea (Native Oatgrass or Tall Oatgrass)





Robust, densely tufted perennials to c. 2 m tall. Occurs along creeks, found in Cann camp.

# Schizachyrium

Schizachyrium pronounced skits-ah-KEER-ee-um. Schizachyrium fragile is a tufted or single stemmed, slender annual. The spikelets are covered with white hairs.



Schizachyrium fragile (Firegrass, Red Spathe Grass)

Plants erect or lying along the ground, 10-0 cm tall. Common on sandy soils.

# Group 2 - Inflorescence digitate or sub-digitate

Inflorescence with two or more branches that come from, or at least appear to come from, a common point at the top of a culm.



#### Key to Genus

1.	Spikelets with long awns Spikelets unawned or with short awns	
2.	Spikelets with brown silky hairs Spikelets with cream hairs	
3.	Upper glume mucronate (with a short sharp point) to shortly awned Upper glume obtuse to acute, not awned or mucronate	

# Alloteropsis

Alloteropsis pronounced a-LOT-er-op-sis. Tufted annual or perennial. Spikelets with short awns.

#### Alloteropsis cimicina (Annual Cockatoo Grass)



Annual 15-50 cm tall. Often with one inflorescence on the plant, with lots of plants growing together. Inflorescence with 4-11 branches, 5-10 cm long. Occurs in woodlands and grasslands.

Alloteropsis semialata (Cockatoo Grass)



Perennial 20-150 cm tall. Inflorescence with 2-5 branches, 2-22 cm long. Occurs in woodlands and grasslands.

# Bothriochloa - Bluegrasses

Bothriochloa pronounced both-ree-o-KLO-a. Tufted, usually erect perennials. Leaves aromatic when crushed. Spikelets in pairs.

#### Bothriochloa decipiens (Pitted Bluegrass, Red Grass)





Perennial 30-160 cm tal. Inflorescence with 3-5 branches, 4-7 cm long. The spikelets has a depression, called a pit. Occurs in woodlands.



Bothriochloa ewartiana (Desert Bluegrass)

Perennial 30-60 cm tall. Inflorescence with 4-11 branches, 3.5-7 cm long. Occurs in woodlands and grasslands.

# **Dichanthium** - Bluegrasses

Dichanthium pronounced die-KANTH-ee-um. Tufted perennials with usually bearded nodes. Spikelets in pairs.

#### Dichanthium sericeum subsp. sericeum (Queensland Bluegrass)



Perennial 10-120 cm tall. Inflorescence with 1-6 branches, 1.5-7 cm long. Occurs in woodlands and grasslands.

# Digitaria - Finger Grasses

Digitaria pronounced dij-i-TAIR-ee-a.

Perennials or annuals, erect to prostrate perennials or annuals. Inflorescence spike-like racemes, digitately, subdigitately or once-branched panicle arranged. Spikelets in groups of 2 or 3.

Perennial 8-70 cm tall. Panicle with 1-4 branches, 1.5-2 cm long. Spikelets are small, 1.25-2.0 mm long. Usually on rocky, stony sites, in crevices, on shallow, often sandy soil.

#### Digitaria breviglumis

#### Digitaria brownii (Cotton Panic Grass)





Perennial 30-100 cm tall. Inflorescence with 2-7 branches, 5-18 cm long. Spikelets with long white hairs. Occurs in forests, woodlands, and grasslands.

#### Digitaria ciliaris (Summer Grass, Crab Grass)





Annual 10-90 cm tall. Inflorescence with 2-12 branches, 6-20 cm long. Spikelets not hairy. Widespread weed.

#### Digitaria imbricata

Perennial 30-60 cm tall. Inflorescence with 3-4 branches, 3-6.5 cm long. Occurs in woodlands.

# Eulalia

*Eulalia* pronounced yoo-LAY-lee-a. Erect perennial. Spikelets in pairs.





Perennial 40-150 cm tall. Inflorescence with 2-4 branches, 3-14 cm long. Spikelets with brown silky hairs. Occurs often in ephemeral water courses on heavy alluvial soils.





# Aristida

#### Aristida pronounced aris·TIE·da.

Annual or perennial grasses, often with wiry stems frequently growing on poor soils. This genus is distinguished by having three awns (bristles) on each spikelet. There are many species that grow in Burra Range.

Aristida benthamii (Bentham's Wiregrass)



Perennial 50-90 cm tall, often leaves are curved at maturity. Inflorescence contracted 1-2 cm wide. Grows in open forests and on sandy soil.





Perennial 30-60 cm tall, leaves are straight at maturity. Inflorescence contracted 1-2 cm wide. Grows on sandy or hard, stony soil.



Perennial 30-100 cm tall. Inflorescence usually open 2-20 cm wide. Grows on red earths, sands and alluvial soils.



Aristida pruinosa (Gulf Feathertop Wiregrass)



Perennial 60-150 cm tall. Inflorescence open 2-4 wide. Occurs in woodlands and grasslands on red earths, sands and alluvial soils.

#### Aristida burraensis

Perennial 40-80 cm tall. Inflorescence contracted 2 cm wide. *Aristida holathera* (Erect Kerosine Grass, Large Silver Grass, White Grass) Annual or perennial 25-100 cm tall. Inflorescence 1-10 cm wide. *Aristida inaequiglumis* (Feathertop Threeawn, Unequal Threeawn) Perennial 30-150 cm tall, often leaves are curved at maturity. Inflorescence contracted 1.5-4 cm wide. *Aristida ingrata* Perennial 40-155 cm tall. Inflorescence contracted 1.5-4 cm wide.

### Enneapogon - Nineawn Grasses

Enneapogon pronounced en-nee-a-PO-gon.

Annual or perennial, tufted grasses. Inflorescence a narrow, spike-like panicle. Spikelets with 3-6 florets which each floret as 9 feathery awns, the upper ones are smaller, sterile, or rudimentary.

#### Enneapogon lindleyanus (Lindley Nineawn)



Annual or perennial 15-50 cm tall. Inflorescence compacted 0.5-4.5 cm long. Usually grows on hills.

# Enneapogon polyphyllus (Leafy Nineawn, Limestone Bottlewashers)



Annual or perennial 5-50 cm tall. Inflorescence compacted 4-11 cm long. Occurs in open woodlands.



Perennial 10-60 cm tall. Inflorescence compacted 3-10 cm long. Occurs in open woodlands.

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**Amphipogon** Amphipogon pronounced am-fee-PO-gon. Perennial grasses, leaf blades are woody, needle-like. Inflorescence a single spike.

#### Amphipogon sericeus



Perennial 20-50 cm tall. Inflorescence spike-like 2-6 cm long. Occurs on sandstone soil in open low woodlands and grasslands.



# Group 4 - Spikelets with 1 or 2 awns, inflorescence with open branches



# Key to Genus

1.	Spiklets with 2 awns Spikelets with 1 awn	
2.	Spikelets dark red-brownSpikelets pale green	Sarga
3.	Lowest branches of inflorescence are whorled Lowest branches of inflorescence are not whorled	Chrysopogon

# Arundinella

Arundinella pronounced ah-RUN-din-el-a.

Annual or perennial, mostly with tough, erect stems. Inflorescence is an open panicle.

Arundinella setosa (Reed Grass)



Perennial 50-120 cm tall, with cane-like stems. Inflorescence 5-30 cm long, 3-6 cm wide. Grows on rocky ground, in open woodlands and grasslands, usually near creeks.

# Chrysopogon

*Chrysopogon* pronounced kry-so-PO-gon. Coarse, tufted, perennials with stout rhizomes. Spikelets in pairs.



Chrysopogon fallax (Golden Beardgrass)



Perennial 30-120 cm tall. Leaf sheaths disingrateinto fibres with age. Inflorescence 7-21 cm long, 2.5-7 cm wide, the lower branches are whorled. Occurs mainly in open woodlands on a variety of soils.

# Eriachne - Wanderrie Grasses

Eriachne pronounced air-ree-ACK-nee.

Annual or perennial grasses. Inflorescence is a raceme, a spike-like panicle, or an open panicle. Glumes spreading at maturity.

#### Eriachne armitii (Longawn Wanderrie Grass)





Annual 15-50 cm tall. Inflorescence contracted 3-10 cm long, 1 cm wide. Occurs includes on skeletal, clayey, loamy, and sandy soils, also in seasonally wet sites near swamps, lakes and watercourses, and disturbed ground.

#### Eriachne ciliata (Slender Wanderrie Grass)





Annual or ephemeral 5-35 cm tall. Inflorescence open 4-12 cm long, 1.5-4 cm wide. On shallow and skeletal, sandy or loam soils.

# Sarga

Sarga pronounced SAR-ga. This name is not accepted in other states where it called Sorghum. Tall perennial. Spikelets in pairs.









Perennial 100-250 cm tall. The stems have distinctive bearded nodes. The inflorescence is usually a dense panicle 10-40 cm long with dark red-brown spikelets. Occurs on sands, red earths, and heavy loams, and grows in swamps, claypans, watercourses, waterholes, and valleys.





# Key to Genus

1.	Spiklets are interupted on the inflorescence Spikelets not interupted on the inflorescence	
2.	Inflorescence usually purple Inflorescence green to white	
3.	Spiklets with 1 awn, erect Spikelets with 2 awns, spreading	

# Elytrophus

*Elytrophorus* pronounced el-ee-TRO-fus. Annual grass. Inflorescence a contracted panicle. Spikelets are very small.

#### Elytrophorus spicatus (Spikegrass)



Annual 5-40 cm tall. Inflorescence 2-30 cm long. Occurs on damp soil along creeks, and damp hollows and seepages.

# Eragrostis (Ectrosia)

Eragrostis pronounced air-ah-GROS-tis.

*Ectrosia* has been distinguished from *Eragrostis* primarily by having awned spikelets but based on molecular DNA studies in 2020, the genus of *Ectrosia* has changed to *Eragrostis*. *Ectrosia* species are annual or perennial.





Annual or perennial 10-50 cm tall. Inflorescence purple, green or white, 5-15 cm long. Occurs on a variety of soils, grows in swamps and watercourses.

# Eriachne - Wanderrie Grasses

*Eriachne* pronounced air-ree-ACK-nee.

Annual or perennial. Inflorescence is a raceme, a spike-like panicle, or an open panicle.

Eriachne armitii (Longawn Wanderrie Grass)

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Annual 15-50 cm tall. Inflorescence contracted 3-10 cm long, 1 cm wide. Occurs includes on skeletal, clayey, loamy, and sandy soils, also in seasonally wet sites near swamps, lakes and watercourses, and disturbed ground.

# Sehima

Sehima pronounced SE-hi-mah. Annual or perennial. Inflorescence a solitary fragile spike-like raceme. Spikelets in pairs.



Sehima nervosum (Rat's Tail Grass, Whitegrass)

Perennial 30-100 cm tall. Leaves a blue-green colour (glaucous). Inflorescence an unbranched panicle. Occurs on red soils, loams, sandy soils.

Group 6 - Spikelets with bristles, long hairs subtending spikelet, or spine-like structures



#### Key to Genus

Spiklets with red or pink hairs	Melinis
Spiklets with pale green bristles	Setaria

# Melinis

*Melinis pronounced* MEH-lin-us. Aromatic annual or perennial. Hairy spikelets.

#### Melinis repens (Red Natal Grass)







Annual or perennial 20-150 cm tall. The inflorescence is pink or red and then turn white in colour as they mature. A very common weed of roadsides, railways, footpaths, disturbed sites, and waste areas.

# Setaria - Pigeon Grasses

Setaria pronounced se-TAR-i-a. Inflorescence a dense spike-like panicle, has 1-numerous bristles subtended the spikelet.



#### Setaria surgens (Pigeon Grass)



Annual 20-50 cn tall. Spikelets surrounded by 4-8 bristles. In woodlands, shrublands and grasslands.

# Group 7 Awns absent or short, inflorescence with open branches, with obvious secondary branches



# Key to Genus

1.	Spikelets with two florets Spikelets with three or more florets	
2	Florets are hairy; glumes are similar in length	
2.	Florets are glabrous; lower glume is shorter than the upper one	
3.	Leaf blades hard, woody, need-like Leaf blades not hard, woody needle-like	



# Eragrostis - Lovegrasses

#### *Eragrostis* pronounced air-ah-GROS-tis.

Annuals or perennials. Inflorescence with spikelets on contracted or an open panicle. Spikelets flattened with 3 to many identical florets.

# 

Annual 2.5-50 cm tall. Inflorescence 1-10 cm long. Spikelets with 10-30 florets. Near watercourses in clay, sand or loams.

#### Eragrostis brownii (Brown's Lovegrass, Common Lovegrass)



Perennial 11-60 cm tall. Inflorescence 5 -30 cm long. Spikelets with 8-24 florets. Occurs in open woodlands, scrublands and grasslands.

#### Eragrostis cumingii (Cuming's Lovegrass)



Usually annual 3-50 cm tall. The inflorescence comprising more than half height of plant. Spikelets with 10-20 florets. Occurs in woodlands, scrublands and grasslands, on variable soils

Eragrostis elongata (Clustered Lovegrass)



Perennial 20-80 cm cm tall. Inflorescence 5-20 cm long. Spikelets with 6-25 florets. Occurs in variable soils, often near well-watered habitats, on sandy soils.



Annual 5-80 cm tall. Inflorescence branches whorled at lower node. Spikelets 4-10 florets. This grass is prolific along the roadsides, it occurs around the start of Burra Range, next to toilets.



Perennial 50-110 cm tall. Inflorescence 5-75 cm long. Spikelets with 6-60 florets. Grows mostly in sandy soils, it occurs in Cann Camp.

#### Eragrostis pubescens
#### Eragrostis spartinoides





Perennial 70-80 cm tall. Inflorescence 5-55 cm long. Spikelets with 8-50 florets. In a range of habitats. In a range of sandy and clayey soils.

#### *Eragrostis speciosa* (Handsome Lovegrass)



Perennial 15-120 cm tall. Inflorescence 5-45 cm long. Spikelets with 10-100 florets. Commonly in sandy, seasonally wet habitats, e.g. creeks.

#### Eragrostis filicaulis

Perennial 11-60 cm tall. Inflorescence 5-10 cm long. Spikelets with 14-35 florets. *Eragrostis lacunaria*Annual or perennial 10-60 cm tall. Inflorescence 4-20 cm long. Spikelets with 8-40 florets. *Eragrostis sororia*Perennial 20-60 cm tall. Inflorescence 5-20 cm long. Spikelets with 5-35 florets. *Eragrostis stenostachya*Perennial 22-50 cm tall. Inflorescence 4-10 cm long. Spikelets with 6-25 florets. *Eragrostis tenellula* (Delicate Lovegrass)
Annual 5-80 cm tall. Inflorescence 4-40 cm long. Spikelets with 2-12 florets.

## Eriachne

Eriachne pronounced air-ree-ACK-nee.

Annual or perennial. Inflorescence is a raceme, a spike-like panicle, or an open panicle.

Eriachne mucronata (Mountain Wanderrie Grass)

\*



Perennial 10-60 cm tall. Inflorescence 2-8 cm long, 0.5-1 cm wide. Occurs on skeletal and shallow soils on rocky slopes and crests of hills, ridges, or plateaux.

Eriachne obtusa (Northern Wanderrie Grass)



Perennial 30-60 cm tall. Inflorescence 4-7cm long, 1-4 cm wide. Occurs on skeletal, shallow or deep soils. Grows in sandplains and marshes, lagoons, depressions, and swamps.

## Panicum - Panic Grass

Panicum pronounced PA-ni-kum.

Annual or perennial. Inflorescence a compact or open panicle. Spikelets usually solitary or in pairs.

#### Panicum decompositum (Native Millet)





Perennial 30-80 cm tall. Inflorescence 15-35 cm long. Occurs over a wide area of arid and semiarid habits.



### Panicum effusum (Hairy Panic)



Perennial 10-70 cm tall. Basal leaves are hairy. Inflorescence 8-40 cm long. Occurs in grasslands, open woodlands and on disturbed sites.



Annual 20-60 cm tall. Inflorescence 40-20 cm long. Spikelets pale to purple colour. Grows in woodlands and scrubs.

Panicum trachyrhachis





Annual 60-170 cm tall. The plant has spongy/inflated hollow base and spongy lower leaves. Inflorescence 30-65 cm long. Usually found growing in woodlands, grasslands, and aquatic habitats.

#### Panicum mindanaense

Annual or perennial 20-80 cm tall. Inflorescence 10-30 cm long. Usually found growing in heaths, woodlands, and grasslands, sometimes favouring moist places.

# Trioidia - Spinifex or Porcupine Grass

Triodia pronounced try-OH-dee-a.

Plants of the species are strongly xerophytic, long-lived perennials with sharply pointed often needle like leaves.



Triodia pungens (Soft Spinifex, Gummy Spinifex)

Perennial 15-150 cm tall. Resin only on leaves. Inflorescence open or contracted, 14-25 cm long and 1-2.5 cm wide. On a range of deep to skeletal, rocky and gravelly soils.





Perennial 15-150 cm tall. Resin present on leaves and inflorescence. Inflorescence open or contracted, 10-26 cm long and 2-6 cm wide. Occurs in sandy soils, and its common on creek banks.



## Key to Genus

1.	Inflorescence branches ending in bristle-like appendages or spikelets subtended by bristles Paspalidiu Inflorescence branches ending in spikelets which are not subtended by bristles	
2.	Lower branches of the inflorescence very long, rigid, spreading and diverging at maturity, each raceme without spikelets <b>Digitar</b> Lower branches of the inflorescence short, usually not stiff, with spikelets at the base	
3	Spikelets very small, 1.25-2.0 mm long	ıta

# Digitaria

Digitaria pronounced dij-i-TAIR-ee-a.

Perennials or annuals, erect to prostrate. Inflorescence spike-like racemes, digitately, sub-digitately or oncebranched panicle arranged. Spikelets in groups of 2 or 3.



Perennial 15-60 cm tall. Leaves greyish. Inflorescence with 5-15 branches, 10-20 cm long. Spikelets hairy, 3-4 mm long. In a range of habitats, usually grassland or low open vegetation.

Digitaria hystrichoides (Curly Umbrella Grass)



Perennial 15-55 cm tall. Leaves greyish. Inflorescence with 5-15 branches, 15-30 cm long. Spikelets hairy, 2-4 mm long. Occurs in grasslands of drier areas.

#### Digitaria diminuta

Perennial 10-60 cm tall. Inflorescence with 4-10 branches, 3.5-15 cm long. Spikelets small, 1.25-2.0 mm long. It grows in woodlands.

## Urochloa

Urochloa pronounced yu-ro-KLO-a.

Perennials or annuals tufted or creeping. Inflorescence with once-branched panicle. Spikelets arranged on one side.

Urochloa holosericea subsp. holosericea (Silkytop Armgrass)



Annual 15-60 cm tall. Inflorescence with 4-6 branches, 0.8-3.5 cm long. Spikelets are hairy. Occurs in woodlands.

### Urochloa mosambicensis (Sabi Grass)



Perennial 20-130 cm tall. Inflorescence with 2-12 branches, 2-10 cm long. A common weed in northern Australia.





Annual 15-60 cm tall. Inflorescence with 3-4 branches, 2-6 cm long. Spikelets are hairs. Occurs in woodlands, shrublands and grasslands.

Urochloa see also Group 9.

Paspalidium see Group 9.



# Group 9 Awns absent or short, inflorescence appears unbranched





#### Key to Genus

1.	Spikelets with 3-12 florets Spikelets 2-flowered	Tripogonella 2
2.	Inflorescence branches ending in bristle-like appendages Inflorescence branches ending in spikelet	-
3.	Spikelets hairy Spikelets glabrous	Digitaria 4
4.	Leaf blade breaks off at the collar Leaf blade not breaking of at the collar	
5.	Perennial 30-70 cm tall, with stout rootstock and roots	



## Cleistochloa

Cleistochloa pronounced cly-sto-KLO-a.



A wiry perennial grass, up to 60 cm tall. Leaf blade breaks off at the collar. Inflorescence 1-3.5 cm long. Two types of spikelets are found, one type consists of 2-6 spikelets on a terminal spike and a second one consists of a solitary spikelet. Occurs in woodlands and shrublands, often associated with sandy and poorer soils.

# Digitaria

Digitaria pronounced dij-i-TAIR-ee-a.

Perennials or annuals, erect to prostrate. Inflorescence spike-like racemes, digitately, sub-digitately or oncebranched panicle arranged. Spikelets in groups of 2 or 3.



Annual 25-35 cm tall. Inflorescence 4-15 cm long. Spikelets with white hairs. Spikelets hairy. Grows in woodlands and grasslands

### Digitaria gibbosa

## Eremochloa

*Eremochloa* pronounced air-e-mo-KLO-a. Perennial. Inflorescence is a solitary spike-like raceme.



Perennial 30-70 cm tall. It will have a distinctive rootstock; the basal leaf sheaths are flattened and keeled. Inflorescence 5-10 cm long. Occurs in woodlands, often on poor soils.

## Paspalidium

Paspalidium pronounced pas-pa-LID-i-um.

Annual or perennial. Inflorescence is a one-sided raceme, each extending as a bristle beyond the point of attachment of the last spikelet.

#### Paspalidium gracile (Slender Panic)





Wiry perennial 10-80 cm tall. Inflorescence with 5-10 branches. Usually grows on rocky hillsides.



Annual 15-40 cm tall. Inflorescence of this species is unique, typically the lateral branches are reduced to a single spikelet. Usually occurs in woodlands, shrublands and grasslands



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### Paspalidium spartellum



Perennial 50-100 cm tall. Inflorescence with 4-6 branches. Occurs in open forest on shallow, sandy soil.

### Thaumasatochloa

Thaumastochloa pronounced thor-mas-a-to-KLO-a.

#### Thaumastochloa pubescens



Annual 12-25 cm tall. Inflorescence of 3-8 spikelets. Low lying damp sandy places in open savanna forests and in disturbed places.

# Tripogonella

Tripogonella pronounced tri-po-gen-EL-a



Tripogonella loliiformis (Fiveminute Grass, Eight-day Grass)

Annual 3.5-20 cm tall. Inflorescence solid or compound, 2-8 cm long. Spikelets with 3-12 florets. In a variety of habitats. Regarded as a 'resurrection plant' as it is able to produce green leaf from dry butts, and flowers and fruits in a very short time after rain. Occurs in a variety of habitats.

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