

## SCHOENUS

**Description:** Perennials or annuals, rhizomatous or tufted. **Culms** nodeless or 1--several-noded, erect or rooting at the nodes, terete or obtusely trigonous. **Leaves** either all basal or also cauline on noded culms, linear, flat or canaliculate, sometimes reduced to mucronate sheaths; mouth of leaf sheath often hairy, with or without a ligule. **Inflorescence** panicle-like with often widely separated nodes (with spikelets solitary or clustered), or head-like, or reduced to a single spikelet; lowest involucre bract leaf-like. **Spikelets** +/- compressed, usually few-flowered, sessile to long-pedicellate. **Rachilla** straight and with very short internodes in the lower part (between the empty glumes), the upper internodes (between fertile glumes) elongated and prominently zigzag, winged. **Glumes** distichous, the lowest ones empty, the uppermost one often strongly reduced and empty. **Flowers** in the hollows of the zigzag rachilla, usually bisexual, but the uppermost often male. **Hypogynous bristles** up to 6, filiform or scale-like, ciliate to plumose or antrorsely scabrous, or absent. **Stamens** [1-]3(-6). **Style** (2-) or 3-fid, continuous with ovary, deciduous. **Nut** sessile or shortly stipitate, trigonous, mostly obliquely shaped, mostly 3-ribbed, occasionally hispid near apex.

**Distribution and occurrence:** World: c. 100 species, mainly South-East Asia & Australia, also New Zealand, New Caledonia, Micronesia, Europe & South America. Australia: 90 species (c. 85 species endemic), all States.

Key to the genus <i>Schoenus</i>		
1	Inflorescence head-like or consisting of only 1–5 spikelets in 1 or 2 small clusters	2
	Inflorescence elongated, with spikelets clustered at several often distant nodes	17
2	Small, soft-textured leafy, tufted annuals, or small, mat-forming, decumbent or erect perennials; if erect, culms no more than 12 cm long; mouth of leaf sheath and margins of glumes always glabrous	3
	Erect perennials, more or less rigid, shortly rhizomatous or tufted; culms mostly more than 12 cm long, if less then mouth of leaf sheath and/or margins of glumes hairy	9
3	Tufted annuals	4
	Small, mat-forming, erect or decumbent perennials	6
4	Inflorescence head-like; glumes red-brown to blackish	<i>Schoenus apogon</i> <b>ACT, ST</b>
	Inflorescence of 1–5 spikelets; glumes straw-coloured to dark red-brown	5
5	Fertile glumes 5–7.5 mm long; nut prominently ribbed	<i>Schoenus latelaminatus</i> <b>ACT</b>
	Fertile glumes 3.0–4.5 mm long; nut winged, at least near apex	<i>Schoenus centralis</i>
6	Leaves much exceeding culms	7
	Leaves shorter than culms	8
7	Culms no more than 2.5 cm long; nut minutely reticulate-pitted or smooth	<i>Schoenus calyptratus</i> <b>ST</b>
	Culms at least 4 cm long; nut minutely red-brown hispidulous at apex, whitish or red-brown over rest of body and minutely reticulate	<i>Schoenus evansianus</i> <b>ST</b>
8	Glumes acute; anthers 0.8–1.0 mm long; bristles 3–6, not plumose, shorter than nut; culms decumbent, leafy at nodes	<i>Schoenus maschalinus</i> <b>ST</b>

	Glumes obtuse to broad-acute; anthers 1.5–2.0 mm long; bristles 6, plumose, about as long as nut; culms erect, nodeless	<i>Schoenus nitens</i> <b>ST</b>
9	Inflorescence a single spikelet (rarely to 3 in <i>S. lepidosperma</i> and <i>S. pachylepis</i> )	10
	Inflorescence a head-like cluster of spikelets (rarely a second smaller cluster in <i>S. ericetorum</i> )	12
10	Spikelets 8–22 mm long; fertile glumes 8–16 mm long; bristles scale-like	11
	Spikelets 3–5 mm long; fertile glumes 2.7–4 mm long; bristles plumose	<i>Schoenus nitens</i> <b>ST</b>
11	Spikelets 8–11(–14) mm long; fertile glumes 8–11 mm long; anthers 3.3–4.5 mm long excluding apical appendage 0.3–0.5 mm long; hypogynous scales acute to acuminate, narrow, reaching a third to half the way up body of nut; nut 3.1–3.5 mm long, 1.8–2.0 mm diam.; shortly rhizomatous; culms slender, 0.3–0.5 mm diam	<i>Schoenus lepidosperma</i>
	Spikelets 15–22 mm long; fertile glumes 13–16 mm long; anthers 6.3–9 mm long excluding apical appendage 0.8–1.8 mm long; hypogynous scales obtuse or rarely acute, very broad, scarcely reaching to top of stipe; nut (including stipe) 4.2–5 mm long, 2.0–2.5 mm diam.; tufted (very shortly rhizomatous); culms relatively coarse, 0.5–1.2 mm diam	<i>Schoenus pachylepis</i> <b>ST</b>
12	Involucral bracts at least twice as long as inflorescence, to 8 cm long	13
	Involucral bracts less than twice as long as inflorescence (often shorter than it), to 2.5 cm long	14
13	Tufted; 2–4 involucral bracts much longer than inflorescence	<i>Schoenus turbinatus</i>
	Rhizomatous; a single involucral bract much longer than inflorescence	<i>Schoenus nitens</i> <b>ST</b>
14	Stamens 3; nut 1.3–1.5 mm long	15
	Stamens 4–6; nut 1.4–2.7 mm long	16
15	Mouth of leaf sheath long-ciliate; glumes 6–11, lowest 4–8 empty	<i>Schoenus ericetorum</i> <b>ST</b>
	Mouth of leaf sheath glabrous or sparsely and minutely ciliate; glumes 5–7, lowest 3–5 empty	<i>Schoenus imberbis</i>
16	Leaf sheaths loose around the culms, surface shining, smooth; mouth of sheath sparsely ciliate	<i>Schoenus subaphyllus</i>
	Leaf sheaths tight, surface more or less dull, striate, papillose; mouth of sheath glabrous	<i>Schoenus kennyi</i>
17	Small, soft-textured leafy, tufted annuals, or small, mat-forming or decumbent perennials; if erect, culms no more than 20 cm long	18
	Rigid, erect perennials ( <i>Schoenus apogon</i> , shortly rhizomatous or tufted; culms mostly 10–130 cm long, if less then culms scabrous ( <i>S. moorei</i> ) or leaves very numerous and filiform ( <i>S. tesquorum</i> ))	22
18	Decumbent or loosely mat-forming slender perennial; nut surface faintly scrobiculate or reticulate or smooth	<i>Schoenus maschalinus</i> <b>ST</b>
	Erect, tufted annuals; nut surface pitted, reticulate, or trabeculate	19
19	Bristles absent or several, minute; fertile glumes 3.0–7.5 mm long	20
	Bristles 5 or 6, somewhat shorter than or equalling nut; fertile glumes 2.0–5.5 mm long	21

20	Fertile glumes 5–7.5 mm long; nut prominently ribbed	<i>Schoenus latelaminatus</i> <b>ACT, ST</b>
	Fertile glumes 3.0–4.5 mm long; nut winged, at least near apex	<i>Schoenus centralis</i>
21	Inflorescence with 5–9 distant clusters of mostly long-pedicellate spikelets; glumes straw-coloured with red-brown patches; nut blackish brown	<i>Anthelepis paludosa</i>
	Inflorescence with a head-like cluster of subsessile spikelets plus 1–4 smaller clusters below; glumes red-brown to blackish; nut whitish	<i>Schoenus apogon</i> <b>ACT, ST</b>
22	Leaves obvious; blade well-developed, to 30 cm long	23
	Leaves not obvious; blade to 3 cm long or reduced to a small bract on sheath	27
23	Spikelets 20–30 mm long	<i>Schoenus calostachyus</i>
	Spikelets 2–14 mm long	24
24	Nut transversely wrinkled, hairy or glabrous; culms scabrous or smooth	25
	Nut smooth or minutely pitted-reticulate or longitudinally striate and trabeculate, glabrous; culms smooth	26
25	Nut hairy; culms scabrous; mouth of leaf sheath glabrous or slightly ciliate	<i>Schoenus moorei</i> <b>ST</b>
	Nut glabrous; culms smooth; mouth of leaf sheath densely long-ciliate	<i>Schoenus villosus</i> <b>ST</b>
26	Perennial, with numerous filiform leaves at base of plant; bristles several minute or absent	<i>Schoenus tesquorum</i>
	Annual, leafy but without numerous filiform leaves at base; bristles 5 or 6, shorter than to equalling nut	<i>Schoenus apogon</i> <b>ACT, ST</b>
27	Culms not noded	28
	Culms with 1-several nodes	30
28	Mouth of leaf sheath glabrous; sheaths dark red-brown, more or less smooth; fertile glumes 7–10 mm long	<i>Schoenus brevifolius</i>
	Mouth of leaf sheath villous or woolly; leaf sheaths dark red-brown to blackish, scaberulous; fertile glumes 4–7 mm long	29
29	Culms 1.3–2.5 mm in diameter, with longitudinal ribs (costal zones) wider than intercostal zones; inflorescence 7–25 cm long	<i>Schoenus melanostachys</i>
	Culms 0.6–0.9 mm in diameter, with longitudinal ribs (costal zones) narrower than intercostal zones; inflorescence 3–7 cm long	<i>Schoenus rupicola</i>
30	Inflorescence with 5–9 nodes; spikelets 8–11 mm long; fertile glumes 7–9 mm long; anthers 3.0–4.5 mm long; nut c. 1.5 mm long (no stipe present), c. 0.8 mm diam.	<i>Schoenus vaginatus</i>
	Inflorescence with 2 or 3 nodes; spikelets 12–21 mm long; fertile glumes 12–15 mm long; anthers 5.7–6.2 mm long; nut c. 5.5 mm long (including long stipe), 1.3–1.4 mm diam.	<i>Schoenus scabripes</i>

***Schoenus apogon***, Common Bog-rush, Fluke Bog-rush

**Synonyms:** *Schoenus apogon* var. *reductus* Kuek, *Schoenus apogon* var. *laxiflorus* (Steud.) C.B. Clarke & Cheeseman, *Schoenus apogon* var. *apogon* Roem. & Schult.

**Description:** Tufted annual. Culms erect, flaccid, terete, striate, nodeless or 1-noded, 3–25 (occasionally to 55) cm long, 0.5–1.2 mm diam. Leaves with blade to 15 cm long; sheath straw-coloured to dark red-

brown, striate, +/- shining; mouth glabrous; ligule present. Inflorescence of 1 loosely hemispherical cluster of 6-16 spikelets, usually with 1-4 clusters below, erect, 1-15 cm long; lowest involucre bract to 17 cm long. Spikelets narrow-ovate, acute, 1-3-flowered, 2.5-7.5 mm long. Glumes 4-6, lowest 2-4 empty, narrow-ovate, acute, red-brown to blackish, shining, with glabrous margins, midvein often scabrous; fertile glumes 2.0-5.5 mm long. Bristles 5 or 6, not plumose, shorter than or equalling nut. Stamens 3; anthers 1.0-3.2 mm. Nut trigonous, obovoid to subglobose, 1.0-1.2 mm long, 0.6-0.8 mm diam., +/- 3-ribbed, reticulate-pitted to trabeculate, glabrous, shining, whitish.

**Flowering:** spring-summer.

**Distribution and occurrence:** Grows in seasonally wet habitats; extending inland to eastern Western Plains; NC CC SC NT CT ST NWS CWS SWS NWP SWP; Qld, Vic., Tas., S.A., N.Z., Japan.

NSW subdivisions: NC, CC, SC, NT, CT, ST, NWS, CWS, SWS, NWP, SWP. Other Australian states: Qld Vic. Tas. S.A.

A variable species, which may include more than one taxon.

### *Schoenus calyptratus*

**Description:** Dwarf rhizomatous perennial, often mat-forming. Culms erect, flaccid, terete, striate, nodeless, to 2.5 cm long, c. 0.5 mm diam. Leaves stiff, channelled, with blade to 4 cm long, much longer than culms; sheath dark red-brown, striate, shining; mouth glabrous; ligule present. Inflorescence erect, 0.7-1.1 cm long, of 1-4 spikelets in 2 clusters; lowest involucre bract to 4 cm long. Spikelets narrow-ovate, acute, 1- or 2-flowered, 3.5-5 mm long. Glumes 3 or 4, lowest 1 or 2 empty, narrow-ovate, acute, straw-coloured to red-brown, shining, with glabrous margins, midvein occasionally scabrous; fertile glumes 3-4 mm long. Bristles 6, not plumose, as long as or slightly exceeding nut. Stamens 3; anthers 1-2 mm long. Nut trigonous, ellipsoid, 1.2-1.9 mm long, 0.7-1.1 mm diam., 3-ribbed, minutely reticulate-pitted or smooth, shining or glistening, straw-coloured.

**Flowering:** summer.

**Distribution and occurrence:** Grows in alpine herbfields, sometimes forming extensive short turf in the Kosciusko area. NSW subdivisions: ST. Other Australian states: Vic. Tas.

### *Schoenus ericetorum*

**Description:** Tufted perennial. Culms erect, rigid, terete, grooved, smooth or scabrous, nodeless, (10-)15-40 cm long, 0.4-0.8 mm diam. Leaves with blade to 1.5 cm long; sheath red-brown, scaberulous or papillose, +/- dull; mouth long-ciliate or woolly; ligule present. Inflorescence obconic, with 1-14 spikelets in 1 or 2 clusters, 0.5-1.5 cm long; lowest involucre bract to 2 cm long. Spikelets narrow-ovate to linear, acute, 1- or 2-flowered, 4-7 mm long. Glumes 5-9, lowest 4-7 empty, narrow-ovate, acute, very dark red-brown to blackish above, straw-coloured near base, dull, with margins woolly at least near apex, uppermost glumes may be glabrous; fertile glumes 4-5 mm long. Bristles absent. Stamens 3; anthers 1.7-3.7 mm long. Nut trigonous, obovoid to ellipsoid, 1.4-1.8 mm long, 0.8-1.1 mm diam., scarcely 3-ribbed, minutely wrinkled and papillose, glabrous, dull, red-brown with darker patches.

**Flowering:** spring.

**Distribution and occurrence:** Grows in heath and dry sclerophyll forest, on sandy soils; east of a line extending south from Yetman to Warrumbungle Ra., Dubbo, and eastern ST. NSW subdivisions: NC, CC, SC, CT, ST, NWS, CWS, NWP. Other Australian states: Qld Vic.

### *Schoenus evansianus*

**Description:** Small, tufted, shortly rhizomatous perennial. Culms very slender, erect, smooth, striate, nodeless, 4-12 cm long, 0.2-0.4 mm diam. Leaves with blade to 12 (rarely to 23) cm long; sheath red-brown to straw-coloured, striate, +/- shining; mouth glabrous; ligule present. Inflorescence consisting of 1-4 spikelets in 1 or 2 clusters, 1-4 cm long; lowest involucre bract to 5 cm long. Spikelets narrow-ovate, acute, 1- or 2-flowered, 3.5-5.5 mm long. Glumes 4-6, lowest 2-4 empty, narrow-ovate, acute, straw-coloured to red-brown, +/- shining, with glabrous margins; fertile glumes 3.0-4.0 mm long. Bristles 6, not plumose, about as long as nut. Stamens 3; anthers 1.5-2.0 mm long. Nut trigonous, ellipsoid, 1.2-1.4 mm long, 0.4-0.7 mm diam., prominently 3-ribbed, minutely reticulate, glistening or shining, whitish with hispidulous red-brown apex or evenly red-brown.

**Flowering:** spring-summer.

**Distribution and occurrence:** Grows in damp places around sandstone outcrops in the Blue Mtns south to the Budawang Ra. NSW subdivisions: SC, CT, ST

### *Schoenus latelaminatus*

**Description:** Leafy tufted annual. Culms erect, flaccid, terete, striate, nodeless, 2–20 cm long, 0.5–1.5 mm diam. Leaves with blade to 11 cm long; sheath straw-coloured to red-brown, striate, dull; mouth glabrous; ligule present. Inflorescence erect, narrow, 2–22 cm long, with 2–6 nodes, each with 1–5 spikelets; lowest involucre bract to 14 cm long. Spikelets narrow-ovate, acute, 2–6-flowered, 6–12 mm long. Glumes 4–9, lowest 1 or 2 empty, narrow-ovate, acute, straw-coloured to dark red-brown, ± shining, with glabrous margins and often scabrous midvein; fertile glumes 5–8.2 mm long. Bristles absent or minute. Stamens 3; anthers 1.4–3.8 mm long. Nut trigonous, ellipsoid, 1.2–2 mm long, 0.8–1 mm diam., prominently 3-ribbed, reticulate-pitted, glabrous, ± shining, greyish to black-spotted or evenly pale brown.

**Flowering:** spring.

**Distribution and occurrence:** Very sporadic, south from Yetman along Western Slopes, extending to Hunter Valley. Grows in seasonally wet places. NSW subdivisions: NC, CWS, SWS, NWP. Other Australian states: ACT, Vic. S.A.

### *Schoenus maschalinus*

**Description:** Small, loosely mat-forming perennial. Culms very slender and flaccid, decumbent, noded and branching, 4–20 cm long, 0.3–0.5 mm diam. Leaves with blade to 3 cm long; sheath straw-coloured to reddish, striate, +/- shining; mouth glabrous; ligule absent. Inflorescence 3–8 cm long, with 2–6 nodes, each with 1 or 2 spikelets; lowest involucre bract to 2 cm long. Spikelets ovate, acute, 1- or 2-flowered, 2–4 mm long. Glumes 3–5, lowest 1 or 2 empty, ovate, acute, whitish to dark red-brown, +/- shining, with glabrous margins, midvein often scabrous; fertile glumes 2–3.5 mm long. Bristles (3–)6, not plumose, shorter than nut. Stamens 2 or 3; anthers 0.8–1.0 mm long. Nut trigonous, ellipsoid, 0.8–1.3 mm long, 0.6–0.8 mm diam., 3-ribbed, minutely scrobiculate or reticulate to smooth, glabrous, glistening or shining, white to straw-coloured.

**Flowering:** spring-summer.

**Distribution and occurrence:** NC CC SC CT ST; all States except N.T.; N.Z., Marianas, Malesia. Grows in damp to swampy places in coastal areas (ranges only on NC) and tablelands. NSW subdivisions: NC, CC, SC, CT, ST. Other Australian states: Qld Vic. Tas. W.A. S.A.

### *Schoenus moorei*

**Description:** Tufted perennial. Culms erect, rigid, scabrous, terete, striate, nodeless, 7–22 cm long, 0.5–1.3 mm diam. Leaves with blade to 18 cm long, mostly rather curly; sheath yellow-brown to dark brown, scabrous, +/- shining; mouth hyaline, glabrous or slightly ciliate with margins overlapping; ligule absent. Inflorescence erect, narrow, 3–10 cm long, with spikelets clustered at 2–5 nodes; lowest involucre bract to 12 cm long. Spikelets ovate, acute, 2–4-flowered, 5–12 mm long. Glumes 3–5, lowest 1 or 2 empty, narrow-ovate, acute, yellow-brown to dark red-brown, +/- dull, with glabrous or ciliate margins, midvein occasionally ciliolate; fertile glumes 5–10 mm long. Bristles absent or several minute. Stamens 3; anthers 2.1–4.0 mm. Nut trigonous, obpyriform to obovoid, 1.0–1.8 mm long, 0.8–1.0 mm diam., 3-ribbed, transversely wrinkled, hairy, glistening, whitish to straw-coloured to dark brown.

**Flowering:** spring-summer.

**Distribution and occurrence:** Grows in heath, on sandy soils; coastal areas south from Hawkesbury R., inland to Blue Mtns and eastern ranges of ST, with apparent outliers near Narrabri and Lees Pinch. NSW subdivisions: CC, SC, CT, ST, NWS, CWS. Other Australian states: ?Vic.

### *Schoenus nitens*

**Synonyms:** *Schoenus nitens* var. *major* Ewart & Jean White *Schoenus nitens* var. *concinus* (Hook.f.) Cheeseman

**Description:** Small perennial, with slender creeping rhizome. Culms erect, rigid, grooved, nodeless, 3–37 cm long, 0.5–1 mm diam. Leaves with blade to 16 cm long; sheath red-brown, smooth or striate, shining; mouth glabrous; ligule present. Inflorescence head-like, loosely hemispherical, or reduced to 1 spikelet,

erect, 0.2-1 cm diam.; lowest involucre bract to 6 cm long. Spikelets ovate, acute, 2- or 3-flowered, 3-5 mm long. Glumes 4-7, lowest 1-3 empty, broad-ovate, obtuse to broad-acute, red-brown to dark yellow-brown, +/- shining, with glabrous, hyaline, red-dotted margins; fertile glumes 2.7-4 mm long. Bristles 6, plumose, about as long as nut. Stamens 3; anthers 1.5-1.7 mm long. Nut trigonous, ellipsoid to obovoid, 1.1-1.6 mm long, 0.7-1.1 mm diam., angles not ribbed, smooth or minutely and faintly scrobiculate, glabrous, shining, straw-coloured to golden brown.

**Flowering:** spring-summer.

**Distribution and occurrence:** Usually grows in damp areas behind beaches or beside brackish soaks farther inland; along coast and beside Lake Bathurst. NSW subdivisions: NC, CC, SC, ST. Other Australian states: Qld Vic. Tas. W.A. S.A.

### *Schoenus pachylepis*

**Synonyms:** *Schoenus lepidosperma* subsp. *pachylepis* (S.T.Blake) K.L.Wilson

**Description:** Perennial, tufted (or rarely very shortly rhizomatous); culms erect, rigid, terete, deeply grooved, nodeless, relatively coarse, 10–60 cm long, 0.5–1.2 mm diam. Leaves with blade to 0.4 cm long; sheath partly red-brown, partly straw-coloured, smooth to striate, ± shining; mouth glabrous; ligule present. Inflorescence of 1[–3] spikelets, c. 2 cm long; lowest involucre bract 0.1–0.2 cm long. Spikelets narrow-ovate, acute, 1–3-flowered, Glumes 5–8, lowest 3–5 empty, ovate to narrow-ovate, acute, straw-coloured to red-brown or blackish, evenly coloured or patchy, ± shining, with margins usually ciliate at apex and glabrous below; fertile glumes 13–16 mm long; anthers 6.3–9 mm long excluding apical appendage 0.8–1.8 mm long. Hypogynous scales obtuse or rarely acute, very broad, scarcely reaching to top of stipe. Nut ± cylindrical with stipe, 4.2–5 mm long (including stipe), 2.0–2.5 mm diam., not or scarcely 3-ribbed, smooth or finely reticulate, glabrous, dull to glistening, whitish to very dark brown to blackish.

**Flowering:** spring–summer.

**Distribution and occurrence:** All along the coast of NSW, extending inland to the Blue Mountains and Clyde Mountain; also in Qld and NE Victoria. NSW subdivisions: NC, CC, SC, CT, ST. Other Australian states: Qld Vic.

Recent morphological and molecular studies (Bruhl, Gibbs, Musili and Wilson ined.) have shown that this is distinct enough to be regarded as a species rather than as a subspecies of *S. lepidosperma*.

### *Schoenus tesquorum*

**Description:** Small, tufted perennial. Culms erect, more or less rigid, terete, striate, nodeless to 2-noded, 6-45 cm tall, 0.5-1.2 mm diam. Leaves filiform, numerous; blade to 30 cm long; sheath straw-coloured (basal leaves) to very dark red-brown (cauline leaves); mouth glabrous; ligule present. Inflorescence narrow, erect, 2-15 cm long, with spikelets clustered at 2-4 distant nodes; lowest involucre bract to 5 cm long. Spikelets narrow-ovate, acute, 2-6-flowered, 4-7 mm long; glumes 4-8, lowest 2 sterile, acute, dark yellow-brown to red-brown, shining, with glabrous, hyaline margins; fertile glumes 3.5-5.5 mm long; hypogynous bristles absent or several minute. Nut trigonous, obovoid, prominently 3-ribbed, smooth or minutely reticulate, glabrous, more or less shining, whitish to grey-brown, 0.7-1.5 mm long, 0.5-0.8 mm diam.

**Flowering:** Flowers spring - summer.

**Distribution and occurrence:** Southern ranges of SC; also in Vic and SA. On swamp margins and wet heathlands. NSW subdivisions: ST. Other Australian states: Vic. S.A.

### *Schoenus villosus*

**Description:** Tufted perennial. Culms erect, rigid, +/- terete, grooved, smooth, noded, 15-40 cm long, 1.2-1.7 mm diam. Leaves with blade to 32 cm long; sheath dark red-brown to blackish, striate, +/- papillose, shining; mouth densely long-ciliate; ligule absent. Inflorescence erect, narrow, 5-30 cm long, with head-like clusters of spikelets at 4-6 distant nodes; lowest involucre bract to 9 cm long. Spikelets ovate, acute, 2-6-flowered, 8-14 mm long. Glumes 7-14, lowest 4-7 empty, narrow-ovate, long-acute, straw-coloured near base, blackish near apex, dull, with margins ciliate to woolly; fertile glumes 7-10 mm long. Bristles 6, minute. Stamens 3; anthers 3.0-4.8 mm long. Nut trigonous, obovoid to ellipsoid, 1.3-1.7

mm long, 0.8-1.0 mm diam., prominently 3-ribbed, transversely wrinkled, glabrous, +/- dull, pale red-brown to grey.

**Flowering:** spring-summer.

**Distribution and occurrence:** Grows in heath and woodland in sandy soils on the coast and associated ranges; north from the Budawang Ra. NSW subdivisions: NC, CC, SC, CT, ST. Other Australian states: Qld