

16.28 ACRACHNE Wight & Arn. ex Chiov.¹

Pl ann; tufted. Clm to approximately 50 cm, erect or geniculate, not wd. Shth open; lig memb, ciliate; bld broadly linear. Infl tml, pan of spikelike br, exceeding the up lvs; br 1.5–10 cm, subdigitate or in whorls along elongate rchs, axes flattened, with imbricate, subsessile spklt, terminating in a rdmt spklt. Spklt lat compressed, with 3–25 flt; dis of the spklt below the glm, of the lm within the spklt acropetal, spklt falling wholly or in part after only a few lm have fallen, pal persistent. Glm 1-veined, keeled, exceeded by the flt; lm 3-veined, strongly

keeled, firmly memb to cartilaginous, glab, cuspidate or awn-tipped. Car modified, prcp hyaline, rupturing at maturity; sd deeply sulcate, ornamented.

Acrachne has four species, all of which are native to the Eastern Hemisphere. One species, *Acrachne racemosa*, which is widely distributed in the tropics, was recently found in southern California. The genus resembles *Eleusine* and *Dactyloctenium* in its fruits and ornamented seeds, but differs from both in its mode of disarticulation.

1. *Acrachne racemosa* (B. Heyne ex Roem. & Schult.)

Ohwi [p. 441, 534]

Acrachne racemosa grows in areas of seasonal rainfall in tropical regions of Africa, Asia, and Australia. It has been found in Riverside County, California and may become established there.

16.29 DACTYLOCTENIUM Willd.²

Pl ann or per; tufted, stln, or rhz. Clm 5–115(160) cm, erect or decumbent, often rooting at the lo nd, not brchg above the base. Shth not overlapping, open, keeled; aur absent; lig memb, memb and ciliate, or of hairs; bld flat or involute. Infl tml, pan of 2–11, digitately arranged spicate br; br with axes 0.8–11 cm long, extending beyond the spklt, terminating in a point, the spklt imbricate in 2 rows on the lo sides. Spklt with 3–7 bisx flt, additional strl flt distally; dis usu above the glm, the flt falling as a unit. Glm unequal, shorter than the adjacent lm, 1-veined, keeled; lo glm

acute, mucronate; up glm subapically awned, awns curved; cal glab; lm memb, glab, 3-veined (lat veins smt indistinct), strongly keeled, apc entire, mucronate, or awned; pal glab; anth 3, yellow; ov glab; sty fused. Sd falling free of the hyaline prcp, transversely rugose or granular.

Dactyloctenium is primarily an African and Australian genus of 10–13 species. Three species have been introduced in the Manual region, two of which have become established. *Dactyloctenium aegyptium* is widespread throughout the warmer areas of the world.

1. Panicle branches 0.4–1.5 cm long; most spikelets touching those of an adjacent branch 2. *D. radulans*
 1. Panicle branches 1.5–7 cm long; only the first few proximal spikelets on each branch in contact with those on an adjacent branch.
 2. Anthers 0.5–0.9 mm long; upper glume awns 1–2.5 mm long 1. *D. aegyptium*
 2. Anthers 1.1–1.7 mm long; upper glume awns 4.5–10 mm long 3. *D. geminatum*

1. *Dactyloctenium aegyptium* (L.) Willd. DURBAN CROWFOOT [p. 442, 534]

Dactyloctenium aegyptium is a widely distributed weed of disturbed sites in the Manual region.

2. *Dactyloctenium radulans* (R. Br.) P. Beauv. BUTTONGRASS [p. 442, 534]

Dactyloctenium radulans has been found at few locations in the Manual region, most of which were associated with wool waste. It is

native to Australia, where it is regarded as a valuable ephemeral pasture grass in the drier inland areas but also as a garden weed.

3. *Dactyloctenium geminatum* Hack. DOUBLE COMBGRASS [p. 442]

Dactyloctenium geminatum is native to tropical eastern Africa. It was found at one time on ballast dumps in Maryland, but has not survived in North America.

16.30 SPOROBOLUS R. Br.³

Pl ann or per; usu csp, smt rhz, rarely stln. Clm 10–250 cm, usu erect, rarely prostrate, glab. Shth open, usu glab, often ciliate at the apc; lig of hairs; bld flat, folded, involute, smt terete. Infl tml, open or contracted pan, smt partially included in the upmost shth. Spklt rounded to lat compressed, with 1(–3) flt(s) per spklt; dis above the glm. Glm 0–1-veined; cal poorly developed, usu glab; lm memb or chartaceous, 1(3)-

veined, unawned; pal glab, 2-veined, often splitting between the veins at maturity; anth (2)3. Car ellipsoid, obovoid, fusiform, or quadrangular, prcp free from the sd, becoming mucilaginous when moist in most species, remaining dry and partially adherent to the sd in *S. heterolepis* and *S. clandestinus*. Cleistogamous spklt occ present in the lo lf shth.

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Sporobolus is a cosmopolitan genus of more than 160 species that grow in tropical, subtropical, and warm-temperate regions throughout the world. Seventy-four species are native to the Western Hemisphere; 27 are native to the *Manual* region, three are established introductions, one was

introduced but has not persisted, and the status of one is uncertain. Two genera of the Western Hemisphere, *Calamovilfa* and *Crypsis*, resemble *Sporobolus* in having hairy ligules, spikelets with 1 floret, 1-veined lemmas, and fruits with a free pericarp.

1. Plants annuals or short-lived perennials flowering in the first year.
 2. Lower panicle nodes with 7–20 branches.
 3. Pedicels 0.1–0.5(1) mm long, appressed 2. *S. pyramidatus* (in part)
 3. Pedicels (2)3–6(8) mm long, widely spreading 3. *S. coahuilensis*
 2. Lower panicle nodes with 1–3 branches.
 4. Spikelets 0.7–1.1 mm long; anthers 0.2–0.3 mm long 1. *S. tenuissimus*
 4. Spikelets 1.6–6 mm long; anthers 0.3–3.2 mm long.
 5. Mature panicles 10–35 cm long, 4.5–30 cm wide, open; secondary branches spreading; pedicels usually 6–25 mm long, spreading 20. *S. texanus* (in part)
 5. Mature panicles 1–5 cm long, 0.2–0.5 cm wide, contracted; secondary branches appressed; pedicels usually 0.1–4 mm long, appressed.
 6. Lemmas strigose; spikelets 2.3–6 mm long; mature fruits (1.1)1.8–2.7 mm long 4. *S. vaginiflorus*
 6. Lemmas glabrous; spikelets 1.6–3 mm long; mature fruits 1.2–1.8 mm long 5. *S. neglectus*
1. Plants perennial.
 7. Plants with rhizomes.
 8. Spikelets 1.4–3.2 mm long.
 9. Panicles 0.4–1.6 cm wide, spikelike, blades usually conspicuously distichous 6. *S. virginicus*
 9. Panicles 2.4–8 cm wide, somewhat contracted to lax and open, blades not obviously distichous 13. *S. fimbriatus*
 8. Spikelets 4–10 mm long.
 10. Panicles (0.6)1–8 cm wide, open to somewhat contracted, narrowly pyramidal, well-exserted from the uppermost sheath; branches without spikelets on the lower $\frac{1}{2}$ 26. *S. interruptus* (in part)
 10. Panicles 0.04–1.6 cm wide, narrow or spikelike, partially to wholly included in the uppermost sheath; branches spikelet-bearing to the base.
 11. Fruits 1–2 mm long; pericarp gelatinous, slipping from the seed when wet; panicles 5–30 cm long, 0.4–1.6 cm wide; lemmas glabrous, smooth 7. *S. compositus* (in part)
 11. Fruits (1.5)2.4–3.5 mm long; pericarp loose but neither gelatinous nor slipping from the seed when wet; panicles 5–11 cm long, 0.04–0.3 cm wide; lemmas minutely pubescent or scabridulous 8. *S. clandestinus* (in part)
 7. Plants without rhizomes.
 12. Upper glumes usually less than $\frac{2}{3}$ as long as the florets.
 13. Lower panicle branches much shorter than the adjacent internodes, appressed to strongly ascending 11. *S. creber*
 13. Lower panicle branches usually as long as or longer than the adjacent internodes, appressed or ascending.
 14. Spikelets 2–2.7 mm long; upper glumes usually $\frac{1}{2}$ – $\frac{2}{3}$ as long as the florets, acute to obtuse, entire 9. *S. indicus*
 14. Spikelets 1.3–1.8(2) mm long; upper glumes usually less than $\frac{1}{2}$ as long as the florets, rarely longer; truncate, erose to denticulate.
 15. Anthers 0.9–1.1 mm long, usually 3, rarely 2; branches spikelet-bearing to the base 10. *S. Jacquemontii*
 15. Anthers 0.5–0.8 mm long, usually 2, rarely 3; branches without spikelets on the lower $\frac{1}{4}$ 12. *S. diandrus*
 12. Upper glumes at least $\frac{2}{3}$ as long as the florets, often longer.
 16. Spikelets 1–2.5(2.8) mm long [for opposite lead, see p. 214].
 17. Lower sheaths keeled and flattened below 14. *S. buckleyi*
 17. Lower sheaths rounded below.
 18. Panicles 12–35 cm wide, open.
 19. Sheath apices with a conspicuous tuft of white hairs; flag blades nearly perpendicular to the culms 18. *S. cryptandrus* (in part)
 19. Sheath apices glabrous or with a few scattered hairs; flag blades ascending.
 20. Secondary panicle branches spikelet-bearing to the base; pedicels mostly appressed, mostly 0.2–0.5 mm long; panicles 20–60 cm long 16. *S. wrightii*

20. Secondary panicle branches without spikelets on the lower $\frac{1}{4}$ – $\frac{1}{2}$; pedicels mostly spreading, mostly 0.5–2.5 mm long; panicles 10–45 cm long.
21. Pedicels 0.5–2 mm long; anthers 1.1–1.8 mm long 17. *S. airoides*
21. Pedicels 6–25 mm long; anthers 0.3–1 mm long 20. *S. texanus* (in part)
18. Panicles 0.2–12(14) cm wide, contracted to open.
22. Mature panicles 0.2–5 cm wide, contracted, often spikelike, the panicle branches appressed or diverging no more than 30° from the rachises.
23. Primary panicle branches without spikelets on the lower $\frac{1}{8}$ – $\frac{1}{2}$ of their length.
24. Leaf blades 1–1.5 mm wide; ligules 0.2–0.4 mm long 21. *S. nealleyi* (in part)
24. Leaf blades 2–6 mm wide; ligules 0.3–1 mm long.
25. Lower panicle nodes with 7–12(15) branches; anthers 0.2–0.4 mm long 2. *S. pyramidatus* (in part)
25. Lower panicle nodes with 1–3 branches; anthers 0.5–1 mm long 18. *S. cryptandrus* (in part)
23. Primary panicle branches spikelet-bearing to the base.
26. Lower glumes usually 1-veined; mature panicles 0.2–0.8(1) cm wide; lemmas 2–3.2 mm long, linear-lanceolate; upper glumes 2–3.2 mm long; anthers 3, 0.3–0.5 mm long; plants primarily from west of the Mississippi River 19. *S. contractus* (in part)
26. Lower glumes usually without veins; mature panicles 1–5 cm wide; lemmas 1.1–2 mm long, ovate; upper glumes 1.1–2 mm long; anthers 2 or 3, 0.5–1 mm long; plants primarily from east of the Mississippi River 15. *S. domingensis*
22. Mature panicles 4.5–30 cm wide, open, pyramidal to subovate or oblong, the panicle branches diverging more than 10° from the rachises, sometimes reflexed.
27. Lower panicle nodes with 7–12(15) branches; anthers 0.2–0.4 mm long 2. *S. pyramidatus* (in part)
27. Lower panicle nodes with 1–2(3) branches; anthers 0.4–1 mm long.
28. Pedicels 6–25 mm long, spreading; panicles 4.5–30 cm wide, about as long as wide, diffuse 20. *S. texanus* (in part)
28. Pedicels 0.1–3 mm long, appressed or spreading; panicles 0.3–14 cm wide, longer than wide, open and/or drooping.
29. Culms 10–50(60) cm tall, 0.7–1.2 mm thick near the base; plants with hard, knotty bases; blades (0.6)1.5–6(7) cm long, 1–1.5 mm wide, involute, spreading at right angles to the culms 21. *S. nealleyi* (in part)
29. Culms 30–120 cm tall, 1–3.5 mm thick near the base; plant bases not hard and knotty; blades (2)5–26 cm long, 2–6 mm wide, flat to involute, ascending or at right angles to the culms.
30. Pedicels appressed to the secondary branches; primary branches appressed, spreading, or reflexed; pulvini glabrous; rachises straight, erect; mature panicles narrowly pyramidal, lower branches longer than the middle branches 18. *S. cryptandrus* (in part)
30. Pedicels spreading from the secondary branches; primary branches reflexed; pulvini pubescent; rachises drooping or nodding; mature panicles subovate to oblong, lower branches no longer than those in the middle 22. *S. flexuosus*
16. Spikelets 2.5–10 mm long [for opposite lead, see p. 213].
31. Lower panicle nodes with 3 or more branches.
32. Mature panicles 2–6 cm wide, pyramidal; panicle branches diverging 20–100° from the rachises; blades 0.8–2 mm wide; fruits 1.4–1.8 mm long 24. *S. junceus*
32. Mature panicles 0.4–1.6 cm wide, narrow, contracted; panicle branches appressed or diverging to 20° from the rachises; blades 2–5 mm wide; fruits 1.8–2.3 mm long 25. *S. purpurascens*
31. Lower panicle nodes with 1–2(3) branches.
33. Mature panicles 0.04–4 cm wide, spikelike; panicle branches appressed.

34. Spikelets 4–6(10) mm long, stramineous to purplish-tinged; panicles terminal and axillary; sheaths without a conspicuous apical tuft of hairs.
35. Lemmas minutely pubescent or scabridulous, chartaceous and opaque; pericarps loose but neither gelatinous nor slipping off the seeds when wet; fruits (1.5)2.4–3.5 mm long 8. *S. clandestinus* (in part)
35. Lemmas usually glabrous and smooth, membranous to chartaceous and hyaline; pericarps gelatinous, slipping off the seeds when wet; fruits 1–2 mm long 7. *S. compositus* (in part)
34. Spikelets 1.7–3.5(4) mm long, whitish to plumbeous; panicles all terminal; sheaths with a conspicuous apical tuft of hairs.
36. Culms 40–100(120) cm tall, 2–4(5) mm thick near the base; mature panicles 0.2–0.8(1) cm wide; anthers 0.3–0.5 mm long 19. *S. contractus* (in part)
36. Culms 100–200 cm tall, (3)4–10 mm thick near the base; mature panicles 1–4 cm wide; anthers 0.6–1 mm long 23. *S. giganteus*
33. Mature panicles (0.6)1–30 cm wide, usually open, narrowly pyramidal to pyramidal or ovate; panicle branches appressed or spreading.
37. Spikelets 2.3–3 mm long; panicles 4.5–30 cm wide, diffuse, about as long as wide; branches capillary; anthers 0.3–1 mm long 20. *S. texanus* (in part)
37. Spikelets 3–7.2 mm long; panicles 0.6–15 cm wide, longer than wide, not diffuse; branches not capillary; anthers 1.5–5 mm long.
38. Mature spikelets plumbeous; sheath bases dull, fibrous.
39. Anthers 3–4.2 mm long; ligules 0.2–0.7 mm long; plants from Arizona 26. *S. interruptus* (in part)
39. Anthers 1.7–3 mm long; ligules 0.1–0.3 mm long; plants not known from Arizona 27. *S. heterolepis*
38. Mature spikelets purplish-brown to purplish; sheath bases shiny, indurate.
40. Blades 0.5–1.2 mm wide, subterete to terete in cross section, at least at the base, sometimes channeled for portions of their length, sometimes becoming tightly involute distally, senescing or turning tan in late fall, the margins smooth; pedicels with scattered ascending hairs 28. *S. teretifolius*
40. Blades 0.8–10 mm wide, flat or V-shaped in cross section, flat, folded, or involute when dry, remaining green well into winter or yellowing at maturity, the margins usually scabridulous, occasionally smooth; pedicels glabrous, sometimes scabridulous or scabrous.
41. Lower glumes from 0.9 times as long as to longer than the upper glumes; culms 30–80(90) cm tall; panicles 10–25 cm long; pedicels 0.5–4(8) mm long, usually shorter than the spikelets, appressed 29. *S. curtissii*
41. Lower glumes from 0.6–0.9 (0.94) times as long as the upper glumes; culms (30)45–250 cm tall; panicles 15–50 cm long; pedicels 2–22 mm long, spreading or appressed.
42. Pedicels appressed; lemmas 4.4–6.5 mm long; anthers 3.5–5 mm long; spikelets purplish 30. *S. silveanus*
42. Pedicels spreading; lemmas 3–4.3 mm long; anthers 2–3.4 mm long; spikelets purplish-brown.
43. Blades (2)3–10 mm wide, pale bluish-green, yellowing at maturity; panicles (18)30–50 cm long, 4–15 cm wide; lower glumes (0.6)0.75–0.94 times as long as the upper glumes 31. *S. floridanus*
43. Blades 1.2–2(3) mm wide, dark green, remaining green well into winter; panicles 15–30 cm long, 2–6 cm wide; lower glumes 0.6–0.83 times as long as the upper glumes 32. *S. pinetorum*

1. *Sporobolus tenuissimus* (Mart. ex Schrank) Kuntze
TROPICAL DROPSEED [p. 442, 535]

Sporobolus tenuissimus is native to the Western Hemisphere, and introduced to Africa and Asia. Its native distribution in the Americas is tropical, extending from southern Mexico to Brazil and Paraguay. It has been found at a few locations in the southeastern United States, at 0–100 m. It grows in disturbed areas, often occurring as a weed in gardens and cultivated fields.

2. *Sporobolus pyramidatus* (Lam.) Hitchc. WHORLED
DROPSEED [p. 442, 535]

Sporobolus pyramidatus is native to the Americas, extending from the southern United States to Argentina. It grows in disturbed soils, roadsides, railways, coastal sands, and alluvial slopes in many plant communities, at elevations from 0–1500 m.

3. *Sporobolus coahuilensis* Valdés-Reyna [p. 442, 535]

Sporobolus coahuilensis is primarily known from central Coahuila in Mexico. It was first found in Brewster County, Texas, in 1966, and it has been collected there as recently as 2003. It was also found in Hudspeth County, Texas, in 1980. It appears to be closely related to the widespread species *S. pyramidatus*, from which it differs in its long capillary pedicels and usually wider panicles.

4. *Sporobolus vaginiflorus* (Torr. ex A. Gray) Alph.
WOOD POVERTY GRASS, SPOROBOLE ENGAÎNÉ [p. 442, 535]

Sporobolus vaginiflorus is a North American species, native to the eastern portion of the *Manual* region and probably introduced in the west. It grows in disturbed sites within many plant communities, commonly in sandy to sandy-clay soils, these often derived from calcareous parent materials. Its elevational range is 1–1250 m.

1. Sheath bases sparsely hairy; glumes usually longer than the florets; lemmas always faintly 3-veined . . . var. *ozarkanus*
1. Sheath bases usually glabrous; glumes usually shorter than the florets; lemmas usually 1-veined var. *vaginiflorus*

Sporobolus vaginiflorus var. *ozarkanus* (Fernald)
SHINNERS OZARK DROPSEED [p. 442]

Sporobolus vaginiflorus var. *ozarkanus* grows primarily in the central and southeastern United States.

Sporobolus vaginiflorus (Torr. ex A. Gray) Alph.
WOOD var. *vaginiflorus* [p. 442]

Sporobolus vaginiflorus var. *vaginiflorus* is the most wide-ranging of the two varieties, extending north into Canada.

5. *Sporobolus neglectus* Nash PUFFSHEATH DROPSEED,
SPOROBOLE NÉGLIGÉ [p. 442, 535]

Sporobolus neglectus is native to the *Manual* region, and grows at 0–1300 m in sandy soils, on river shores, and in dry, open areas within many plant communities, often in disturbed sites. It appears to have been extirpated from Maine and Maryland and is considered endangered or of special concern in Connecticut, Massachusetts, New Hampshire, and New Jersey. It differs from *S. neglectus* in having strigose lemmas, sheaths that are sparsely hairy towards the base and, usually, longer spikelets.

6. *Sporobolus virginicus* (L.) Kunth SEASHORE
DROPSEED [p. 442, 535]

Sporobolus virginicus grows on sandy beaches, sand dunes, and in saline habitats, primarily along the southeastern coast, occasionally inland. Its range extends through Mexico and Central America to Peru, Chile, and Brazil. No fruits of this species have been found despite examination of several natural populations and over 200 herbarium specimens.

7. *Sporobolus compositus* (Poir.) Merr. ROUGH
DROPSEED, SPOROBOLE RUDE [p. 442, 535]

Sporobolus compositus grows along roadsides and railroad right of ways, on beaches, and in cedar glades, pine woods, live oak-pine forests, prairies, and other partially disturbed, semi-open sites at 0–1600 m. Its range lies entirely within the *Manual* region.

The *Sporobolus compositus* complex is a difficult assemblage of forms, perhaps affected by their primarily autogamous breeding system. Asexual proliferation via rhizomes adds to the species' ability to maintain local population structure and to perpetuate unique character combinations.

1. Rhizomes present var. *macer*
1. Rhizomes absent.
 2. Culms slender, 1–2(2.5) mm thick; upper sheaths usually less than 2.5 mm wide; panicles with 16–36 spikelets per cm² when pressed var. *drummondii*
 2. Culms stout, 2–5 mm thick; upper sheaths usually 2.6–6 mm wide; panicles with 30–90 spikelets per cm² when pressed var. *compositus*

Sporobolus compositus (Poir.) Merr. var. *compositus*
[p. 442]

Sporobolus compositus var. *compositus* is the most widespread of the three varieties, being found throughout most of the range shown for the species, but not in South Carolina or Florida.

Sporobolus compositus var. *drummondii* (Trin.)
KARTESZ & GANDHI [p. 442]

Sporobolus compositus var. *drummondii* is most abundant in Kansas, Oklahoma, and Texas.

Sporobolus compositus var. *macer* (Trin.) Kartesz &
Gandhi [p. 442]

Sporobolus compositus var. *macer* is known only from the south-central United States.

8. *Sporobolus clandestinus* (Biehler) Hitchc. HIDDEN
DROPSEED [p. 442, 535]

Sporobolus clandestinus grows primarily in sandy soils along the coast and, inland, along roadsides. In the southeastern United States, it is found in dry to mesic longleaf pine-oak-grass communities and cedar glades. Its range lies entirely within the *Manual* region.

9. *Sporobolus indicus* (L.) R. Br. SMUTGRASS [p. 443,
535]

Sporobolus indicus is a pantropical species. It commonly grows in disturbed places and open areas such as roadsides, pastures, and lake shores. In the *Manual* region, it is found on sandy or clay soils and is associated with many plant communities.

10. *Sporobolus jacquemontii* Kunth RATSTAIL [p. 443,
535]

Sporobolus jacquemontii, like *S. indicus*, is native to North America. It is not a common species in the *Manual* region, being known only from coastal and low elevation sites in Florida. It is sometimes included in *S. indicus* or *S. pyramidalis* P. Beauv.

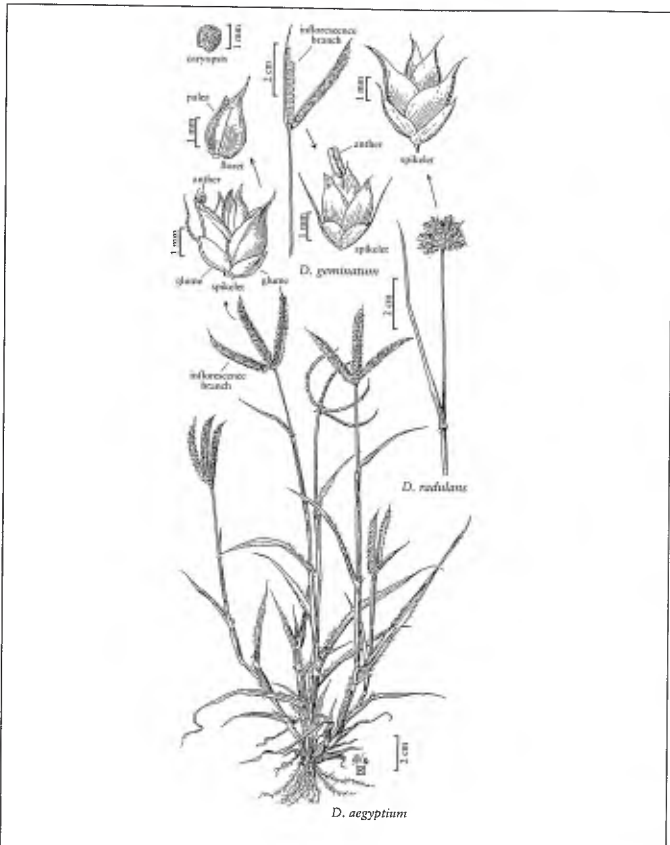
11. *Sporobolus creber* De Nardi [p. 443, 535]

Sporobolus creber is an Australian species that was found in 1995 growing spontaneously on a ranch in Glenn County, California. It differs from *S. indicus* in its widely spaced, closely appressed, and densely spikeleted branches.

12. *Sporobolus diandrus* (Retz.) P. Beauv. [p. 443, 535]

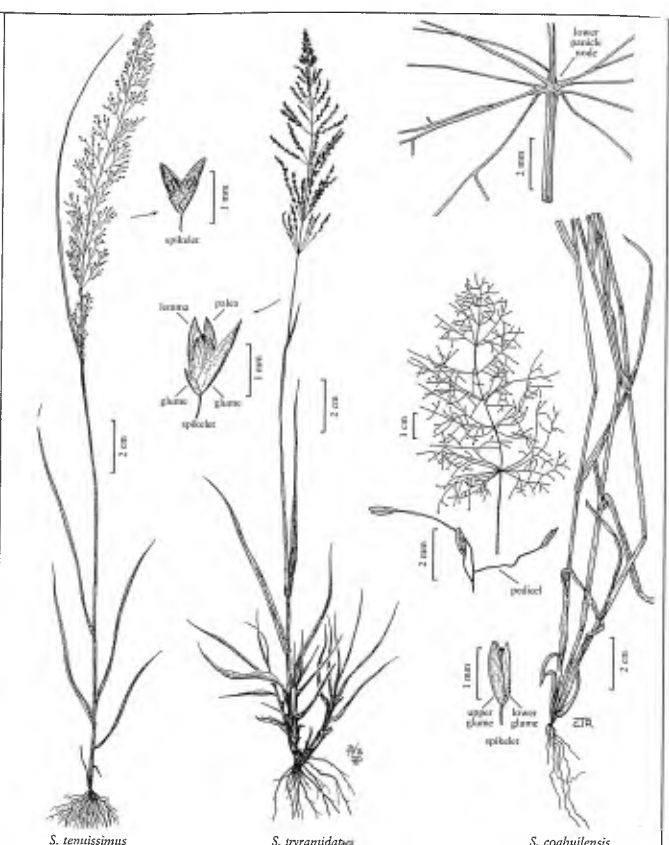
Sporobolus diandrus is native from India to southeast Asia and Australia. It is not common in North America, being known only from a few counties in Florida, Mississippi, and Texas.

13. *Sporobolus fimbriatus* (Trin.) Nees [p. 443]
Sporobolus fimbriatus is an African species that has only been found in waste areas near the sites of old wool mills in Berkeley and Florence counties, South Carolina.
14. *Sporobolus buckleyi* Vasey BUCKLEY'S DROPSEED [p. 443, 535]
Sporobolus buckleyi grows between 0–150 m, in loamy soils near the margins of woods or thorn scrub, sometimes in partial sunlight. Its range extends from southeastern Texas to Belize.
15. *Sporobolus domingensis* (Trin.) Kunth CORAL DROPSEED [p. 443, 535]
Sporobolus domingensis grows in sandy, rocky, or alkaline soils, often in disturbed sites adjacent to the coast and below 20 m. Its range extends to the Antilles and the Yucatan Peninsula, Mexico.
16. *Sporobolus wrightii* Munro ex Scribn. BIG ALKALI SACATON [p. 443, 535]
Sporobolus wrightii grows in moist clay flats and on rocky slopes near saline habitats, from 5–1800 m. Its range extends to central Mexico.
17. *Sporobolus airoides* (Torr.) Torr. ALKALI SACATON [p. 443, 535]
Sporobolus airoides grows on dry, sandy to gravelly flats or slopes, at elevations from 50–2350 m. It is usually associated with alkaline soils. Its range extends into northern Mexico.
18. *Sporobolus cryptandrus* (Torr.) A. Gray SAND DROPSEED, SPOROBOLE À FLEURS CACHÉES [p. 443, 535]
Sporobolus cryptandrus is a widespread North American species, extending from Canada into Mexico. It grows in sandy soils and washes, on rocky slopes and calcareous ridges, and along roadsides in salt-desert scrub, pinyon-juniper woodlands, yellow pine forests, and desert grasslands. Its elevational range is 0–2900 m.
19. *Sporobolus contractus* Hitchc. SPIKE DROPSEED [p. 443, 535]
Sporobolus contractus grows in dry to moist, sandy soils, at elevations from 300–2300 m. It is found occasionally in salt-desert scrub, desert grasslands, and pinyon-juniper woodlands. Its range extends to the states of Baja California and Sonora in Mexico.
20. *Sporobolus texanus* Vasey TEXAS DROPSEED [p. 443, 535]
Sporobolus texanus grows along rivers, ponds, and in wet alkaline habitats, at 100–3300 m. It is known only from the United States.
21. *Sporobolus nealleyi* Vasey GYPGRASS [p. 444, 535]
Sporobolus nealleyi grows in sandy and gravelly soils, usually in those derived from gypsum, or near alkaline habitats associated with desert grasslands. It is known only from the southwestern United States, where it grows at 700–3000 m.
22. *Sporobolus flexuosus* (Thurb. ex Vasey) Rydb. MESA DROPSEED [p. 444, 535]
Sporobolus flexuosus grows on sandy to gravelly slopes, flats, and roadsides in the southwestern United States and northern Mexico. It is associated with desert scrub, pinyon-juniper woodlands, and yellow pine forests. Its elevational range is 800–2100 m.
23. *Sporobolus giganteus* Nash GIANT DROPSEED [p. 444, 535]
Sporobolus giganteus grows in sand dunes and sandy areas along rivers and roadsides, from 100–1830 m. Its range includes the southwestern United States and northern Mexico.
24. *Sporobolus junceus* (P. Beauv.) Kunth PINEY WOODS DROPSEED [p. 444, 535]
Sporobolus junceus grows in openings in pine and hardwood forests, coastal prairies, and pine barrens, usually in sandy to loamy soils, at 2–400 m. Its range lies entirely within the southern United States.
25. *Sporobolus purpurascens* (Sw.) Ham. PURPLE DROPSEED [p. 444, 535]
Sporobolus purpurascens grows in oak scrub, prairie grasslands, and sandy sites near railroad crossings and roadsides, at elevations from 2–300 m. It extends from southern Texas through eastern Mexico, the West Indies, and Central America to Brazil.
26. *Sporobolus interruptus* Vasey BLACK DROPSEED [p. 444, 535]
Sporobolus interruptus grows on rocky slopes and in dry meadows of open yellow pine and oak-pine forests and pinyon-juniper woodlands, at elevations from 1500–2300 m. It is an Arizonan endemic that is morphologically similar to *S. heterolepis*, but the range of the latter lies to the north and east of Arizona. The only reliable morphological difference between them is anther length (3–4.2 mm long in *S. interruptus*, 1.7–3 mm long in *S. heterolepis*).
27. *Sporobolus heterolepis* (A. Gray) A. Gray PRAIRIE DROPSEED, SPOROBOLE À GLUMES INÉGALES [p. 444, 536]
Sporobolus heterolepis grows at elevations of 40–2250 m, in lowland and upland prairies, along the borders of woods, roadsides, and swamps, and in north-facing swales. It is associated with many plant communities, and is also available commercially as an ornamental. It is restricted to the *Manual* region.
28. *Sporobolus teretifolius* R.M. Harper WIRELEAF DROPSEED [p. 444, 536]
Sporobolus teretifolius is restricted to the southeastern United States, where it grows in wet to moist flatwoods and savannahs, at elevations of 10–150 m.
29. *Sporobolus curtissii* Small ex Kearney CURTISS' DROPSEED [p. 444, 536]
Sporobolus curtissii is restricted to the southeastern United States, where it grows in dry-mesic to moist flatwoods, in soils seasonally saturated at the surface or rather well-drained throughout the year. Its elevational range is 0–100 m.
30. *Sporobolus silveanus* Swallen SILVEUS' DROPSEED [p. 444, 536]
Sporobolus silveanus is restricted to the southeastern United States. It grows in wet to mesic pine woodlands and adjoining glades and barren openings, and in blackland prairies, at elevations of 5–200 m.
31. *Sporobolus floridanus* Chapm. FLORIDA DROPSEED [p. 444, 536]
Sporobolus floridanus grows in wet to mesic pine woodlands, seepage bogs, and treeless swales, in soils semi-permanently to seasonally saturated at the surface, and in places where water may pond for weeks, at elevations of 0–100 m. It is endemic to the southeastern United States.
32. *Sporobolus pinetorum* Weakley & P.M. Peterson CAROLINA DROPSEED [p. 444, 536]
Sporobolus pinetorum grows in wet to moist pine woodlands, in soils seasonally to semi-permanently saturated, at elevations of 0–160 m. It is endemic to the southeastern United States.



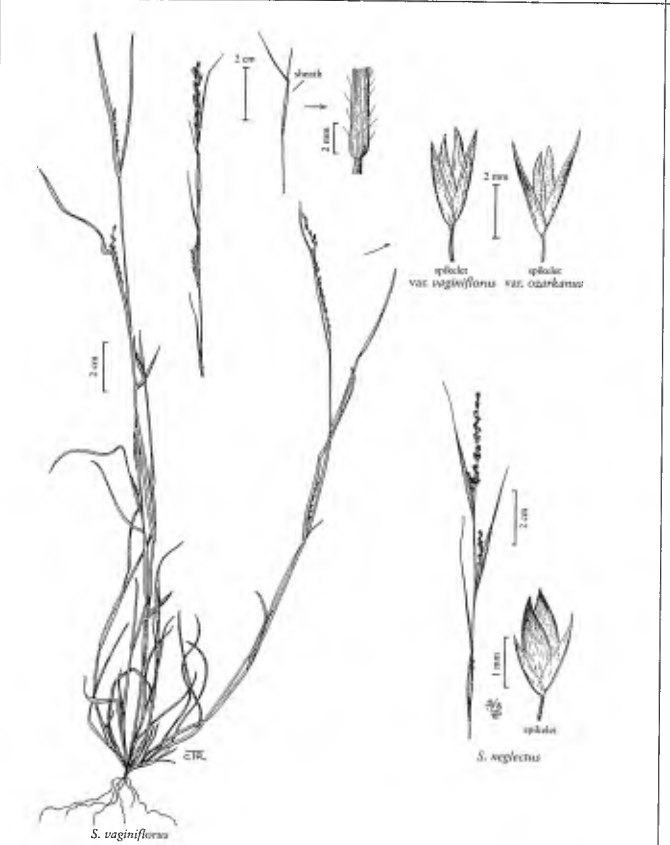
DACTYLOCTENIUM

16.29.1-3



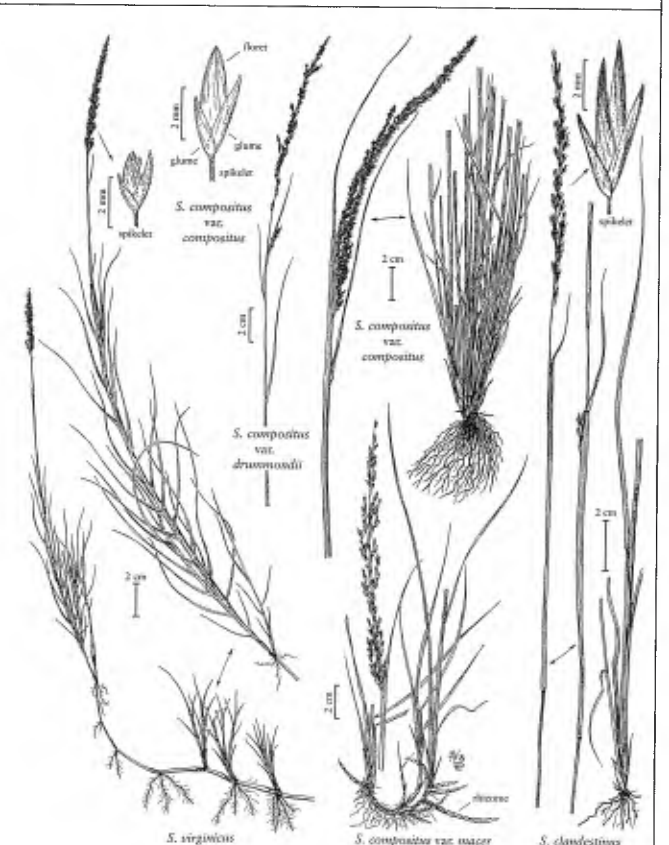
SPOROBOLUS

16.30.1-3



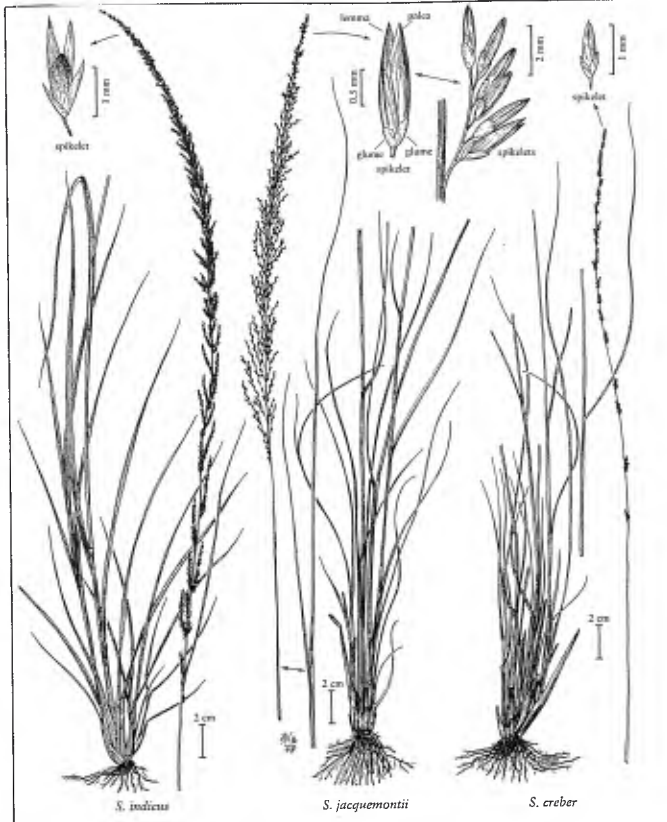
SPOROBOLUS

16.30.4-5



SPOROBOLUS

16.30.6-8



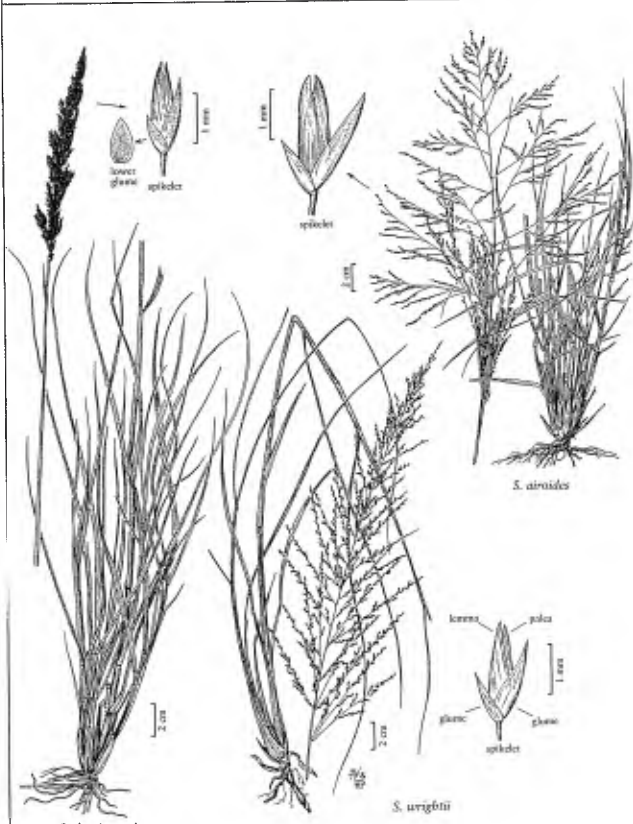
SPOROBOLUS

16.30.9-11



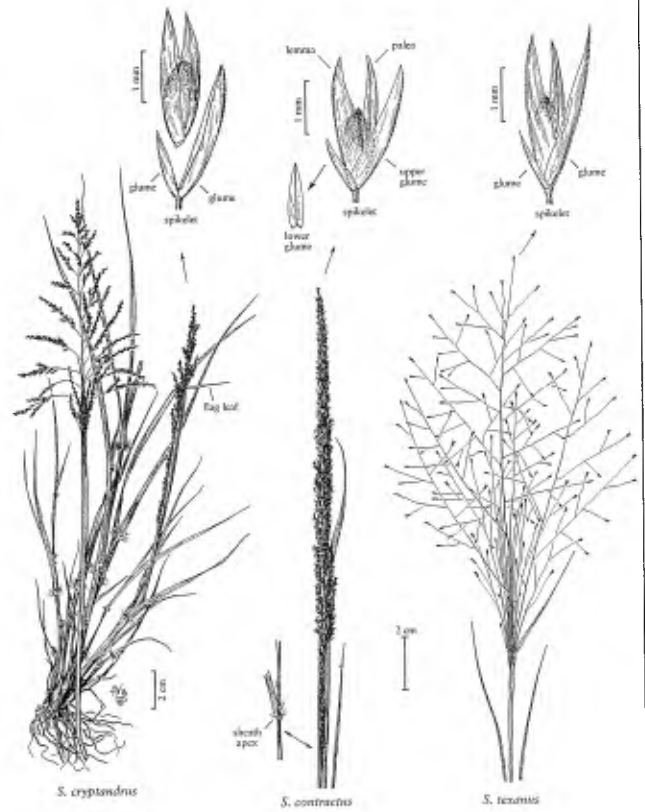
SPOROBOLUS

16.30.12-14



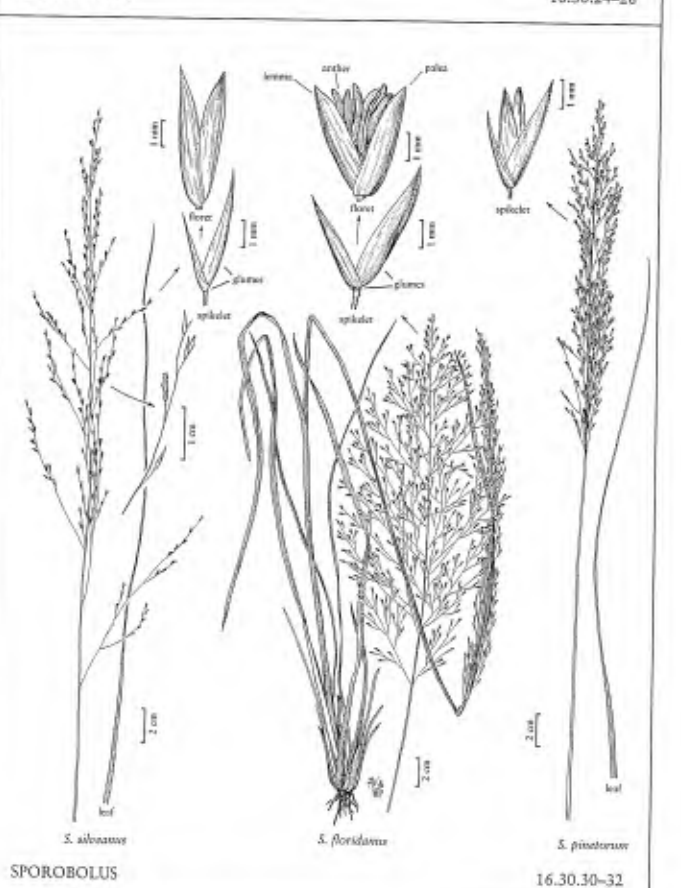
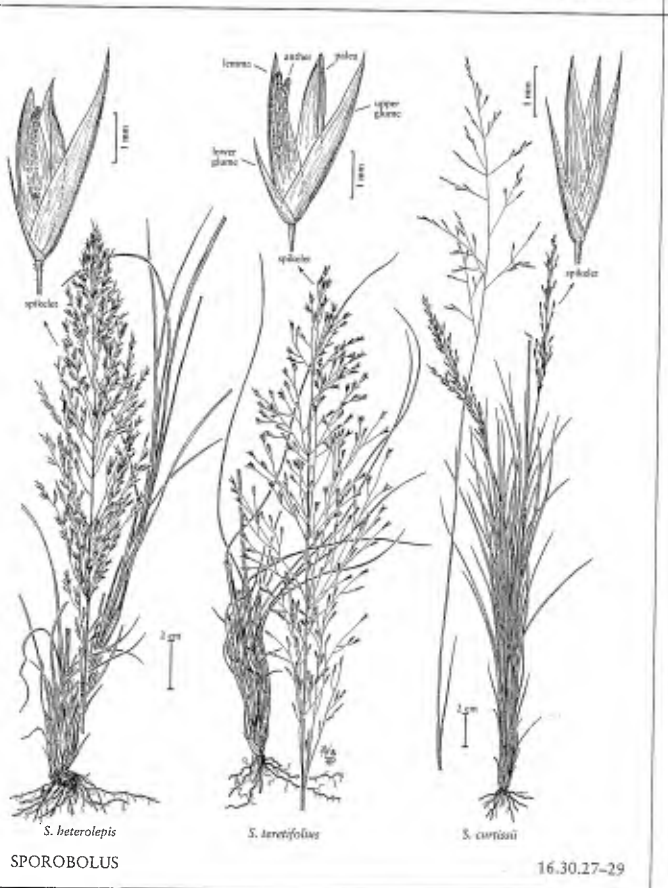
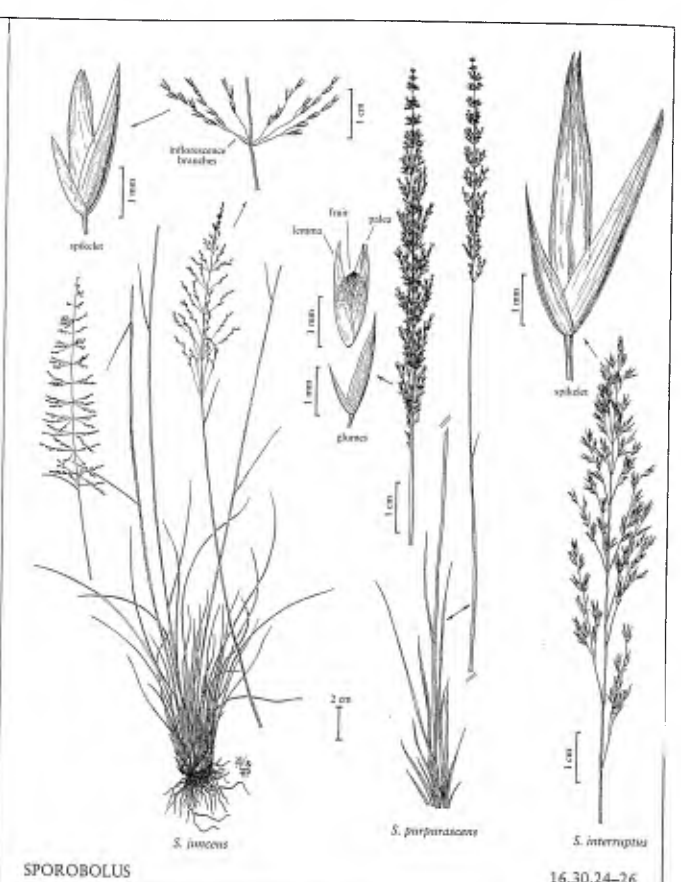
SPOROBOLUS

16.30.15-17



SPOROBOLUS

16.30.18-20

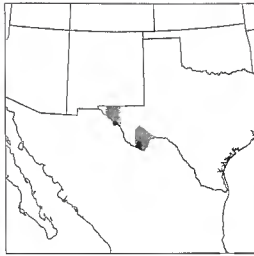




Sporobolus tenuissimus
16.30.1



Sporobolus pyramidatus
16.30.2



Sporobolus coahuilensis
16.30.3



Sporobolus vaginiflorus
16.30.4



Sporobolus neglectus
16.30.5



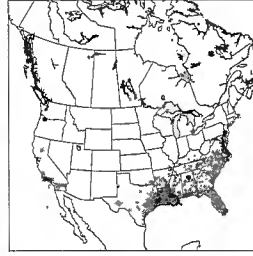
Sporobolus virginicus
16.30.6



Sporobolus compositus
16.30.7



Sporobolus clandestinus
16.30.8



Sporobolus indicus
16.30.9



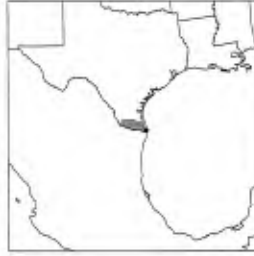
Sporobolus jacquemontii
16.30.10



Sporobolus creber
16.30.11



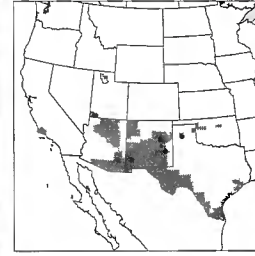
Sporobolus diandrus
16.30.12



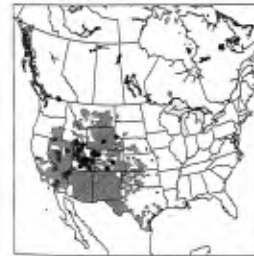
Sporobolus buckleyi
16.30.14



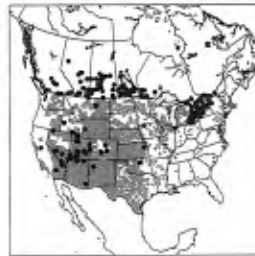
Sporobolus domingensis
16.30.15



Sporobolus wrightii
16.30.16



Sporobolus airoides
16.30.17



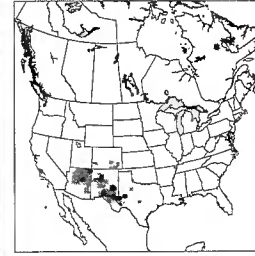
Sporobolus cryptandrus
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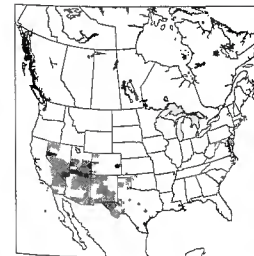
Sporobolus contractus
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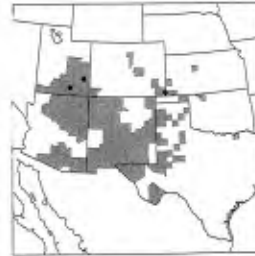
Sporobolus texanus
16.30.20



Sporobolus uealleyi
16.30.21



Sporobolus flexuosus
16.30.22



Sporobolus giganteus
16.30.23



Sporobolus junceus
16.30.24



Sporobolus purpurascens
16.30.25



Sporobolus interruptus
16.30.26



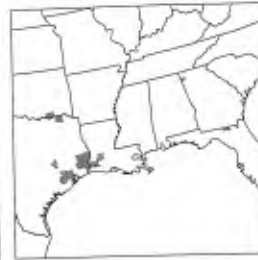
Sporobolus heterolepis
16.30.27



Sporobolus teretifolius
16.30.28



Sporobolus curtissii
16.30.29



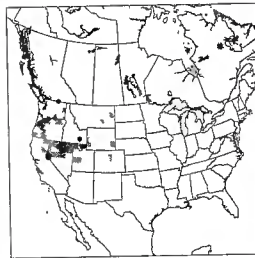
Sporobolus silvaneus
16.30.30



Sporobolus floridanus
16.30.31



Sporobolus pinetorum
16.30.32



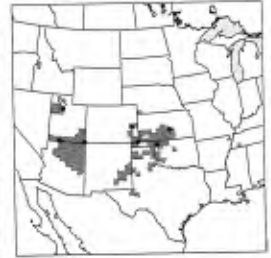
Crypsis alopecuroides
16.31.1



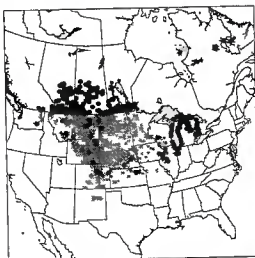
Crypsis schoenoides
16.31.2



Crypsis vaginiflora
16.31.3



Calamovilfa gigantea
16.32.1



Calamovilfa longifolia
16.32.2



Calamovilfa curtissii
16.32.3



Calamovilfa arcuata
16.32.4



Calamovilfa brevipilis
16.32.5



Muhlenbergia racemosa
16.33.1



Muhlenbergia glomerata
16.33.2



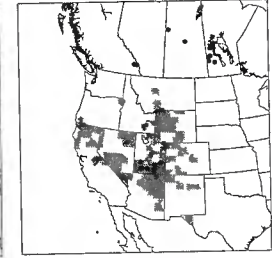
Muhlenbergia mexicana
16.33.3



Muhlenbergia californica
16.33.4



Muhlenbergia glabrifloris
16.33.5



Muhlenbergia andina
16.33.6



Muhlenbergia xcurtisetosa
16.33.7



Muhlenbergia bushii
16.33.8



Muhlenbergia frondosa
16.33.9



Muhlenbergia sobolifera
16.33.10



Muhlenbergia tenuiflora
16.33.11

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