

XIII. FALL GRASSES OF CLEVELAND COUNTY, OKLAHOMA

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Grasses are very widely distributed over the earth's surface. The species are most numerous in the tropical regions, although the plants are scattered and do not form such vast areas as is their habit in the moist temperature regions. In regions of insufficient moisture grasses form bunches which are more or less scattered.

The family is called Poaceae by some authors but Britton and Brown use the name Gramineae which term is used throughout this paper. A very large number of the Gramineae are cosmopolitan. There are upwards of 3,500 species, thus ranking fifth in point of numbers among flowering plants, and are exceeded only by the Orchidaceae among the Monocotyledons. The paramount importance of the family is their great economical value in that they furnish so many plants of commercial use to man.

The separation of the family into subdivisions is a matter of exceptional difficulty. In Gramineae more than in any other family the student is compelled to rely upon combinations of characters rather than upon certain peculiar characters. No agronomist, as yet, has succeeded in establishing a more natural or more definite division than Brown's original primary one into the two great groups, Panicaceae and Poaceae, although many attempts have been made.

In "Genera Plantarum" by Bentham and Hooker the genera of Poaceae are recorded as 289; the species as 3200.

The number of genera now known is not far from 400 and the number of species more than 3,500. Recent botanists are inclined to increase the number of both genera and species.

In the whole of North America there are about 150 native genera comprising about 1300 species of which over 100 species have been introduced, and among them are found some of our

worst pests. The whole number of genera, both native and introduced is about 170 comprising 1400 or more species. Doubtless there are a few species yet to be discovered, especially in the south.

The grasses listed below were collected during the period from September 15, 1922, until frost put a stop to the work.

The list comprises 28 genera and 62 species. Doubtless others will be found later.

The territory covered includes that part of Cleveland county lying within a radius of ten miles of Norman.

Cleveland county due to its warm climate and variety of soils is rich in her number of grasses.

The following is a brief description of the genera found.

Andropogon. This is a polymorphous genus. It was found widely dispersed. Five species are included in this list.

Antheropogon. Only one species found.

Aristida. Tufted grasses with narrow leaves. Found in all dry, sandy places. Wherever the virgin soil is disturbed some form of this grass is almost sure to be found. Five species in the list.

Bouteloua oligostachya locally known as mesquite grass. A grass of the warm dry uplands. Only one species.

Chaetochloa glauca. The yellow Foxtail is common in waste places.

Capriola dactylon. The Bermuda grass is a native of Europe. It is the lawn grass for the south.

Cinna latifolia. Not common in the fall.

Chloris verticillata. It forms a tumble-grass. The genus is named after Chloris, the goddess of flowers. It is very common in dry soil.

Diplachne fascicularis. Very local.

Eragrostis. A large genus widely spread over the county. Why called love-grass is more than I can tell. Ten species were found.

Echinochloa Crus-galli. One of the most cosmopolitan of grasses. Found in wet and dry soils. Often a purple color.

Elysiue indica. A coarse grass. Common.

Homalocenchrus. Two species found. Common in moist shady places.

Leptochloa attenuata. A beautiful grass.

Eriochlea punctata. The Dotted Millet is common in waste places.

Muhlenbergia. This genus centers in the arid regions. The species are very variable. Even in the same panicle variations in the spikelets are found. Three species were collected.

Paspalum. A large tropical and subtropical genus. The species vary much in habit, though most of them grow in sandy soil. Four species found.

Pappophorum apertum. This species is not found in the works of Britton and Brown. Only one specimen was collected.

Phragmites phragmites. This is the great corn-like grass, with the beautiful plume-like panicles, found in river bottoms. Its stolons exceed 20 feet in length.

Panicum. A very large genus. The species cover the county. They furnish most of the "tickle grasses." Six species were collected.

Syntherisma. This is the well-known crab-grass. Very common. Three species in the collection.

Sorghastrum nutans. A grass with many synonyms. Very common along roads and in sandy flats.

Schizachyrium scoparium. Very common in sandy soils. Known as Blue-stem.

Spartina Michauxiana. Very tall marsh grass.

Sporobolus. Widely distributed perennials. Five species were collected.

Tridens. *Flava* is a beautiful species common along road sides. *Stricta* is another species which has spike-like inflorescence.

Uniola latifolia is common in woods. Its nodding, very flat spikelets and its very broad leaves are very noticeable.

SYSTEMATIC LIST OF THE GRASSES COLLECTED NEAR NORMAN IN THE FALL OF 1922

By C. W. Prier

1. *Andropogon glomeratus* (Walt.) B. S. P. Bush Beard-grass.
2. *Andropogon virginicus* L. Virginia Beard-grass.
3. *Andropogon ternarius* Michx. Silvery Beard-grass.
4. *Andropogon furcatus* Muhl. Forked Beard-grass.
5. *Andropogon chrysocomus* Nash. Yellow-haired Beard-grass.
6. *Antheropogon curtispendus*, Fourn. Fall Gramma Grass.
7. *Aristida gracilis* Ell. Slender Triple-awned Grass.
8. *Aristida oligantha* Michx. Few flowered *Aristida*.
9. *Aristida Curtissii*, (A. Gray.) Nash. Curtiss's Triple-awned Grass.
10. *Aristida Wrightii* Nash. Wright's Triple-awned Grass.
11. *Aristida fasciculata* Torr. Triple-awned Beard-grass.
12. *Bouteloua oligostachya* (Nutt.) Torr. Mesquite grass.

13. *Chaetochloa glauca* (L.) Scribn. Yellow Foxtail.
14. *Capriola dactylon* (L.) Kuntze, Bermuda-grass.
15. *Cinna latifolia* (Trev.) Griseb. Slender Wood Reed-grass.
16. *Chloris verticillata* Nutt. Windmill Grass.
17. *Diplachne fascicularis* (Lam.) Beauv. Clustered Love-grass.
18. *Eragrostis secundiflora* Presl. Clustered Love Grass.
19. *Eragrostis Frankii* Steud. Frank's Love-grass.
20. *Eragrostis Weiglana* (Reicheub.) Bush. Hairy Creeping Love-grass.
21. *Eragrostis Purshii* Schrad. Pursh's Love-grass.
22. *Eragrostis major* Host. Strong-scented Love-grass.
23. *Eragrostis capillaris* (L.) Nees. Tiny Love-grass.
24. *Eragrostis pectinacea* (Michx.) Steud. Purple Love-grass.
25. *Eragrostis curtipedicellata* Buckley. Short-stalked love-grass.
26. *Eragrostis pilosa* (L.) Beauv. Hairy Love-grass.
27. *Echinochloa Crus-galli* (L.) Beauv. Cockspur-grass.
28. *Eriochloa punctata* (L.) W. Hamilton, Dotted Millet.
29. *Eleusine indica* (L.) Gaertn. Yard grass.
30. *Homalocenchrus virginicus* (Willd.) Britton, White Grass.
31. *Homalocenchrus oryzoides* (L. Poll.) Rice Cut-grass.
32. *Leptochloa attenuata* Nutt. Sharp-scaled Leptochloa.
33. *Muhlenbergia sobolifera* (Muhl.) Trin. Rock-Dropseed.
34. *Muhlenbergia mexicana* (L.) Trin. Wood Grass.
35. *Muhlenbergia Schreberi* Gmel. Nimble Will.
36. *Paspalum setaceum* Michx. Slender Paspalum.
37. *Paspalum laeve*. Michx. Field Paspalum.
38. *Paspalum floridanum* Michx. Florida Paspalum.
39. *Paspalum laeviglume* Scribn. Smooth-scaled Paspalum.
40. *Pappophorum apertum* Munro.
41. *Phragmites phragmites* (L.) Karst. Common Reed-grass.
42. *Panicum anceps* Michx. Beaked Panic-grass.
43. *Panicum virgatum* (L.) Switch-grass.
44. *Panicum angustifolium* (Ell.) Narrow-leaved Panic-grass.
45. *Panicum dichotomiflorum* Michx. Spreading Witch-grass.
46. *Panicum condensum* Nash. Dense Panic-grass.
47. *Panicum obtusum* H. B. K. Blunt Panic-grass.
48. *Syntherisma sanguinale* (L.) Dulac. Large Crab-grass.
49. *Syntherisma marginatum* (Link) Nash. Fringed Crab-grass.
50. *Syntherisma villosum* Walt. Southern Slender Finger-grass.
51. *Sorghastrum nutans* (L.) Nash. Bush Blue-stem.
52. *Schizachyrium scoparium* (Michx.) Nash. Broom Beard-grass.

53. *Spartina Michauxiana* Hitchc. Fall Marsh Grass.
54. *Sporobolus vagiaeflorus* Torr. Sheathed Rush-grass.
55. *Sporobolus virginicus* (L.) Kunth. Sea-shore Rush-grass.
56. *Sporobolus longifolius* (Torr.) Wood. Long-leaved Rush-grass.
57. *Sporobolus asper* (Michx.) Kunth. Rough-seeded Dropseed.
58. *Sporobolus cryptandrus* (Torr.) Gray. Sand Dropseed.
59. *Tridens flava* (L.) Hitch. Fall Red-top.
60. *Tidens stricta* (Nutt.) Nash. Narrow three-toothed Grass.
61. *Uniola latifolia* Michx. Broad-leaved Spike Grass.

Mounted specimens of all the above are in the Herbarium of the Botany Department of the University of Oklahoma.