

# Morphological Classification descriptions:

The morphological classification was created to be a quick reference to describe the characteristics researched for this project. The following section describes what each part of the code represents.

Using giant cutgrass (*Zizaniopsis miliacea*) as an example the morphological classification will be broken down. Giant cutgrass's morphological classification is G12-S-M-E-N.

- G12 represents one of the 12 morphological groups the grasses were separated into based on the dichotomous key. In this case G12 represents grasses that are tall, have panicle/raceme inflorescences and seeds that disarticulate below the glumes.
- The "S" after the "G12" relates to the awn size of this grasses seed/floret. In this case S stands for short awn.
- The "M" after the "S" relates to the seed size and in this case represents medium sized seeds.
- The "E" which occurs after the "M" relates to the seed/floret shape and represents elongate shaped seeds.
- The "N" after the "E" relates to hairs on the seed/florets and represents those with no hairs.

The following page contains descriptions of the twelve groups and abbreviations for the morphological classification.

# The twelve categories of the morphological classification:

- G1:** Short grass, Spike/spicate raceme inflorescences, Disarticulates above the glumes
- G2:** Short grass, Spike/spicate raceme inflorescences, Disarticulates below the glumes
- G3:** Short grass, Panicle/raceme inflorescences, Disarticulates above the glumes
- G4:** Short grass, Panicle/raceme inflorescences, Disarticulates below the glumes
- G5:** Medium grass, Spike/spicate raceme inflorescences, Disarticulates above the glumes
- G6:** Medium grass, Spike/spicate raceme inflorescences, Disarticulates below the glumes
- G7:** Medium grass, Panicle/raceme inflorescences, Disarticulates above the glumes
- G8:** Medium grass, Panicle/raceme inflorescences, Disarticulates below the glumes
- G9:** Tall grass, Spike/spicate raceme inflorescences, Disarticulates above the glumes
- G10:** Tall grass, Spike/spicate raceme inflorescences, Disarticulates below the glumes
- G11:** Tall grass, Panicle inflorescences, Disarticulates above the glumes
- G12:** Tall grass, Panicle inflorescences, Disarticulates below the glumes

## **Abbreviations used in the morphological classification:**

- **E**-----Elongate shaped seed
- **I**-----Irregular shaped seed
- **O**-----Ovoid shaped seed
- **AL**----Awnless
- **ES**----Extra small sized seed
- **L**-----Long awn or large sized seed
- **S**-----Small awn, or small sized seed
- **M**-----Medium awn or medium sized seed
- **H**-----Seeds hairy
- **N**-----Seeds without hairs

# References Consulted for the Database

1. Clayton, W. D., K. Harman and H. Williamson. (2002 onwards). World Grass Species: Descriptions, Identification, and Information Retrieval.  
<http://www.kew.org/data/grasses-db.html> [accessed 11 May 06- through 29 March 07]
2. Grasses of Iowa <http://www.eeob.iastate.edu/research/iowagrasses/> [accessed 4/27/06-3/22/07]
3. Hitchcock C., A. Cronquist, M. Ownbey and J. Thompson. 1969. Vascular Plants of the Pacific Northwest Part 1: Vascular Cryptogams, Gymnosperms and Monocotyledons. Seventh Printing 2001. U. of Washington Press, Seattle
4. Lavin, Matt and C. Seibert. 2005. Grasses of Montana. MSU (MONT) Herbarium Department of Plant Sciences and Plant Pathology, MSU, Bozeman, MT
5. Native Seed Network <http://www.nativeseednetwork.org/> [accessed 4/27/06-3/22/07]
6. Pratt, M., J. Bowns, R. Banner and A. Rasmussen. 2004. "Grass Index." Range Plants of Utah. Utah State U. Extension Service.  
<http://extension.usu.edu/rangeplants/grass.htm> [accessed 5/12/06-3/29/07]
7. USDA, ARS, National Genetic Resources Program. *Germplasm Resources Information Network - (GRIN)* [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: <http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?315451> [accessed 19 May 2006]
8. Fire Effects Information System, [Online]. USDA, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available:  
<http://fs.fed.us/database/feis> [accessed 5/18/06-2/12/08]
9. USDA. NRCS. 2006. The Plants Database, <http://plants.usda.gov> [accessed 4/27/06-2/12/07] Baton Rouge, LA 708074-4490 USA.
10. USDA. NRCS. The Plants Database, Plant guide for *Bromus carinatus*, [http://plants.nrcs.usda.gov/plantguide/pdf/pg\\_brca5.pdf](http://plants.nrcs.usda.gov/plantguide/pdf/pg_brca5.pdf) [accessed 4/27/06-3/29/07], Baton Rouge, LA 708074-4490
11. USDA. NRCS. The Plants Database, Plant guide for *Buchloe dactyloides*, [http://plants.nrcs.usda.gov/factsheet/pdf/fs\\_buda.pdf](http://plants.nrcs.usda.gov/factsheet/pdf/fs_buda.pdf) [accessed 4/27/06-3/29/07], Baton Rouge, LA 708074-4490
12. USDA. NRCS. The Plants Database Plant guide *Distichlis spicata*, ([http://plants.nrcs.usda.gov/plantguide/pdf/pg\\_disp.pdf](http://plants.nrcs.usda.gov/plantguide/pdf/pg_disp.pdf) [accessed 4/27/06-3/29/07], Baton Rouge, LA 708074-4490

13. U.S Department of Agriculture. NRCS. The Plants Database Plant guide for *Elymus lanceolatus ssp. lanceolatus*, [http://plants.nrcs.usda.gov/plantguide/pdf/pg\\_ellal.pdf](http://plants.nrcs.usda.gov/plantguide/pdf/pg_ellal.pdf) [accessed 4/27/06-3/29/07], Baton Rouge, LA 708074-4490 USA
14. USDA. NRCS. The Plants Database Plant guide for *Festuca idahoensis*, [http://plants.nrcs.usda.gov/plantguide/pdf/pg\\_feid.pdf](http://plants.nrcs.usda.gov/plantguide/pdf/pg_feid.pdf) [accessed 4/27/06-3/29/07], Baton Rouge, LA 708074-4490
15. USDA. NRCS. The Plants Database Plant guide for *Hierochloe odorata*, [http://plants.nrcs.usda.gov/factsheet/pdf/fs\\_hiod.pdf](http://plants.nrcs.usda.gov/factsheet/pdf/fs_hiod.pdf) [accessed 4/27/06-3/29/07] Baton Rouge, LA 708074-4490
16. USDA. NRCS. The Plants Database Plant guide for *Pseudoroegneria spicata ssp. inermis*, [http://plants.nrcs.usda.gov/plantguide/pdf/pg\\_psspi.pdf](http://plants.nrcs.usda.gov/plantguide/pdf/pg_psspi.pdf) [accessed 4/27/06-3/29/07], Baton Rouge, LA 708074-4490 USA
17. USDA. NRCS. The Plants Database Plant guide for *Pseudoroegneria spicata ssp. spicata*, [http://plants.nrcs.usda.gov/plantguide/pdf/pg\\_pssps.pdf](http://plants.nrcs.usda.gov/plantguide/pdf/pg_pssps.pdf) [accessed 4/27/06-3/29/07], Baton Rouge, LA 708074-4490 USA
18. USDA. NRCS. The Plants Database Plant guide for *Sorghastrum nutans*, [http://plants.nrcs.usda.gov/factsheet/pdf/fs\\_sonu2.pdf](http://plants.nrcs.usda.gov/factsheet/pdf/fs_sonu2.pdf) [accessed 4/27/06-3/29/07], Baton Rouge, LA 708074-4490
19. USDA. NRCS. The Plants Database Plant guide for *Spartina pectinata*, [http://plants.nrcs.usda.gov/plantguide/pdf/pg\\_sppe.pdf](http://plants.nrcs.usda.gov/plantguide/pdf/pg_sppe.pdf) [4/27/06-3/29/07], Baton Rouge, LA 708074-4490
20. Gould, F.W. and R.B. Shaw. 1983. Grass Systematics. McGraw-Hill, Inc. Texas A&M U. Press
21. Hitchcock, A.S. 1971. Manual of the Grasses of the United States. Vo.1 and 2. (revised by Agnes Chase) Dover Publications Inc. NY.
22. Smith, S.R. and S. Smith, eds. 2005. Native Grass Seed Production Manual (including selected forbs). Plant Materials Program, USDA-NRCS, Ducks unlimited Canada, Manitoba Seed Assoc. and U. of Manitoba. 155 p.
23. Munshower, F.F. 1991. Perennial Grasses for Revegetation of Disturbed Lands in the Northern Great Plains and the Intermountain Region. Reclamation Unit Publ. No. 9101.
24. Montana Seed Growers Assoc. 2005. Certified Seed Directory. All Crops. MT Seed Growers Assoc. Publ. Montana State U, Marsh Labs.

25. NDSU Extension Service. 1998. Selected North Dakota and Minnesota Range Plants. EB-69 <http://ext.nodak.edu/extpubs/ansci/range/eb69-8.htm> [accessed 5/10/06-5/15/06], North Dakota State University.
26. Plants for a Future, 1993-2004 <http://www.pfaf.org/> [accessed 5/1/06-5/15/06]. England and Wales
27. Calflora Plant Database 2005 <http://www.calflora.org/species/index.html> [accessed 5/1/06-5/15/06], Berkley CA.
28. Center for New Crops and Plant Products. 2006. <http://www.hort.purdue.edu/newcrop/> [accessed 5/1/06-5/15/06], Purdue U..
29. Dorn, R. 1984. Vascular Plants of Montana. Mt. West Publishing, Cheyenne WY.
30. Animal and Range Sciences Extension Service. 2005. Forage Extension Program. Grass Species <http://www.animalrangeextension.montana.edu/articles/forage/species/Grasses/GrassSpeciesList.htm> [accessed 5/1/06-3/29/07]
31. Western Native Seed. 2006. <http://www.westernnativeseed.com/> [accessed 5-1-06-5-15-06], Coaldale Co.
32. USDA. NRCS. The Plants Database Plant Fact Sheet for *Andropogon gerardii*, [http://plants.usda.gov/factsheet/pdf/fs\\_ange.pdf](http://plants.usda.gov/factsheet/pdf/fs_ange.pdf) [accessed 5/1/06-3/29/07], Baton Rouge, LA 708074-4490 USA
33. Intermountain Herbarium. 2006. Grass Manual on the Web, a Web site of information developed in connection with volumes 24 and 25 of the Flora of North America series. Oxford University Press, NY. <http://herbarium.usu.edu/webmanual/> [accessed 12/06-3/07]
34. Stover Seed Company. <http://www.stoverseed.com/> [accessed 3/22/07- 3/29/07]
35. Flora of North America Editorial Committee, M.E. Barkworth, K.E. Capels, S. Long and P. B. Michael. 2007. Flora of North America Volume 24 Magnoliophyta: Commelinidae (In part): Poaceae, part 1. Oxford University Press, New York, NY
36. Flora of North America Editorial Committee, M.E. Barkworth, M.K. Capels, S. Long and P. B. Michael. 2003. Flora of North America Volume 25 Magnoliophyta: Commelinidae (In part): Poaceae, part 2, Oxford University Press, New York, NY
37. Pfaff, Sharon, A.M. Gonter and C. Maura. 2002. Florida Seed Production Manual. USDA, NRCS, Plant Material Center, Brooksville, FL, Available: [http://fipr1.state.fl.us/FIPR/FIPR1.nsf/470e2f6af65c0b0385256b58005ab96f/43b2e411632fac5a85256e3000556453/\\$FILE/flpmcpuf1sdprod.pdf](http://fipr1.state.fl.us/FIPR/FIPR1.nsf/470e2f6af65c0b0385256b58005ab96f/43b2e411632fac5a85256e3000556453/$FILE/flpmcpuf1sdprod.pdf) [accessed 5/1/06-2/13/08]

38. United States Department of Agriculture, NRCS, Plant Materials Program. Planting Guide for *Andropogon glomeratus* var. *glaucoptis* <http://www.plant-materials.nrcs.usda.gov/pubs/flpmcpg7232.pdf> [accessed 12/10/07]
39. USDA. NRCS. Plant Material Center plant release brochure for *Bouteloua repens* 'Dilley' germplasm, <http://www.plant-materials.nrcs.usda.gov/pubs/stpmcrg7393pdf> [accessed 12/9/07], Kika de la Garza PMC, Kin
40. USDA. NRCS. Plant Material Center plant release brochure for *Chloris x subdolichostachya* 'Welder' germplasm, <http://www.plant-materials.nrcs.usda.gov/pub/stpmcrg7446.pdf> [accessed 12/9/07], Kika de la Garza PMC, Kingsville, TX
41. USDA. NRCS. Plants Database Plant Fact sheet for *Ctenium aromaticum*, [http://plants.usda.gov/factsheet/pdf/fs\\_cta.pdf](http://plants.usda.gov/factsheet/pdf/fs_cta.pdf) [accessed 12/9/07], Baton Rouge, LA 708074-4490 USA
42. USDA. NRCS. Plant Material Center plant release brochure for *Dichanthelium scoparium* 'Pilgrim' germplasm, <http://www.plant-materials.nrcs.usda.gov/pubs/etpmcrg7464.pdf> [accessed 12/9/07], Knox City PMC, Knox City, TX
43. USDA. NRCS. Plants Database Plant Guide for *Muhlenbergia asperifolia*, <http://plant-materials.nrcs.usda.gov/bu/azpmcpg7396.pdf> [accessed 12/9/07], Baton Rouge, LA 708074-4490 USA
44. USDA. NRCS. Plants Database Plant Fact Sheet for *Muhlenbergia expansa*, [http://plants.usda.gov/factsheet/pdf/fs\\_mucat.pdf](http://plants.usda.gov/factsheet/pdf/fs_mucat.pdf) [accessed 12/10/07], Baton Rouge, LA 708074-4490 USA
45. USDA. NRCS. Plants Database Plant Fact Sheet for *Panicum abscissum*, [http://plants.usda.gov/factsheet/pdf/fs\\_paab.pdf](http://plants.usda.gov/factsheet/pdf/fs_paab.pdf) [accessed 12/10/07], Baton Rouge, LA 708074-4490 USA
46. USDA. NRCS. Plants Database Plant Fact Sheet for *Panicum amarum* var. *amarulum*, [http://plants.usda.gov/factsheet/pdf/fs\\_paama2.pdf](http://plants.usda.gov/factsheet/pdf/fs_paama2.pdf) [accessed 12/10/07], Baton Rouge, LA 708074-4490 USA
47. USDA. NRCS. .Plant Material Center plant release brochure for *Pappophorum vaginatum* 'Pima' germplasm, <http://www.plant-materials.nrcs.usda.gov/pubs/azpmcar6644.pdf> [accessed 12/10/07], Tucson PMC, Tucson, AZ

48. USDA. NRCS. Plants Database Plant Fact Sheet for *Saccharum brevibarbe* var. *contortum*, [http://plants.usda.gov/factsheet/pdf/fs\\_sabrc3.pdf](http://plants.usda.gov/factsheet/pdf/fs_sabrc3.pdf) [accessed 12/10/07], Baton Rouge, LA 708074-4490 USA
49. USDA. NRCS. Plant Material Center plant release brochure for *Schizachyrium maritimum* ‘Timbalier’ germplasm, <http://www.plant-materials.nrcs.usda.gov/pubs/lapmefs6731.pdf> [accessed 12/10/07], Golden Meadow PMC, Galliano, LA
50. USDA. NRCS. Plants Database Plant Fact Sheet for *Schizachyrium littorale*, [http://plants.usda.gov/factsheet/pdf/fs\\_scli11.pdf](http://plants.usda.gov/factsheet/pdf/fs_scli11.pdf) [accessed 12/10/07], Baton Rouge, LA 708074-4490 USA
51. USDA. NRCS. Plants Database Plant Fact Sheet for *Setaria parviflora*, [http://plants.usda.gov/factsheet/pdf/fs\\_sepa10.pdf](http://plants.usda.gov/factsheet/pdf/fs_sepa10.pdf) [accessed 12/10/07], Baton Rouge, LA 708074-4490 USA
52. USDA. NRCS. Plants Database Plant Fact Sheet for *Sorghastrum secundum*, [http://plants.usda.gov/factsheet/pdf/fs\\_sose5.pdf](http://plants.usda.gov/factsheet/pdf/fs_sose5.pdf) [accessed 12/9/07], Baton Rouge, LA 708074-4490 USA
53. USDA. NRCS. Plants Database Plant Fact Sheet for *Spartina alterniflora*, [http://plants.usda.gov/factsheet/pdf/fs\\_spal.pdf](http://plants.usda.gov/factsheet/pdf/fs_spal.pdf) [accessed 12/10/07], Baton Rouge, LA 708074-4490 USA
54. USDA. NRCS. Plants Database Plant Fact Sheet for *Sporobolus compositus* var. *compositus*, [http://plants.usda.gov/factsheet/pdf/fs\\_spcoc2.pdf](http://plants.usda.gov/factsheet/pdf/fs_spcoc2.pdf) [accessed 12/9/07], Baton Rouge, LA 708074-4490 USA
55. USDA. NRCS. Plants Database Plant Fact Sheet for *Poa pratensis*, [http://plants.usda.gov/factsheet/pdf/fs\\_popr.pdf](http://plants.usda.gov/factsheet/pdf/fs_popr.pdf) [accessed 2/12/08], Baton Rouge, LA 708074-4490 USA
56. Stubbendeisk, J., S.L Hatch and L.M. Landholt. 2003. North American Wildland Plants, U. of Nebraska Press
57. USDA. NRCS. Plant Material Center plant release brochure for *Schizachyrium scoparium* ‘Badlands’ ecotype, <http://www.plant-materials.nrcs.usda.gov/pubs/ndpmcbrb7356.pdf> [accessed 2/4/08], Bismarck PMC, Bismarck, ND
58. USDA. NRCS. Plant Material Center plant release brochure for *Dichanthelium clandestinum* ‘Tioga’, <http://www.plant-materials.nrcs.usda.gov/pubs/nypmcrbdicltiog.pdf> [accessed 2/4/08], Big Flats PMC, Corning, NY

59. USDA. NRCS. Plant Material Center plant release brochure for *Digitaria californica* 'La Salle' germplasm, <http://www.plant-materials.nrcs.usda.gov/pubs/stpmcrb7394.pdf> [accessed 2/5/08], Kika de la Garza PMC, Kingsville, TX
60. USDA. NRCS. Plant Material Center plant release brochure for *Elymus glaucus* ssp. *glaucus* and *Elymus glaucus* ssp. *jepsonii*, 'Arlington', 'Elkton', <http://www.plant-materials.nrcs.usda.gov/pubs/orpmcrbelglj2elkt.pdf> [accessed 2/5/08], Corvallis PMC, Corvallis, OR
61. USDA. NRCS. Plants Database Plant Guide for *Elymus multisetus*, [http://plants.usda.gov/plantguide/pdf/pg\\_elmu3.pdf](http://plants.usda.gov/plantguide/pdf/pg_elmu3.pdf) [accessed 2/5/08], Baton Rouge, LA 708074-4490 USA
62. USDA. NRCS. Plants Database Plant Guide for *Leymus triticoides*, [http://plants.usda.gov/plantguide/pdf/pg\\_letr5.pdf](http://plants.usda.gov/plantguide/pdf/pg_letr5.pdf) [accessed 2/5/08], Baton Rouge, LA 708074-4490 USA
63. USDA. NRCS. Plants Database Plant Fact Sheet for *Elymus wawawaiensis*, [http://plants.usda.gov/factsheet/pdf/fs\\_elwa2.pdf](http://plants.usda.gov/factsheet/pdf/fs_elwa2.pdf) [accessed 2/5/08], Baton Rouge, LA 708074-4490 USA
64. USDA. NRCS. Plants Database Plant Fact Sheet for *Eragrostis intermedia*, [http://plants.usda.gov/factsheet/pdf/fs\\_erin.pdf](http://plants.usda.gov/factsheet/pdf/fs_erin.pdf) [accessed 2/5/08], Baton Rouge, LA 708074-4490 USA
65. USDA. NRCS. Plants Database Plant Fact Sheet for *Eragrostis spectabilis*, [http://plants.usda.gov/factsheet/pdf/fs\\_ersp.pdf](http://plants.usda.gov/factsheet/pdf/fs_ersp.pdf) [accessed 2/5/08], Baton Rouge, LA 708074-4490 USA
66. USDA. NRCS. Plants Database Plant Fact Sheet for *Eragrostis trichodes*, [http://plants.usda.gov/factsheet/pdf/fs\\_ertr3.pdf](http://plants.usda.gov/factsheet/pdf/fs_ertr3.pdf) [accessed 2/5/08], Baton Rouge, LA 708074-4490 USA
67. USDA. NRCS. Plants Database Plant Fact Sheet for *Eriochloa sericea*, [http://plants.usda.gov/factsheet/pdf/fs\\_erse5.pdf](http://plants.usda.gov/factsheet/pdf/fs_erse5.pdf) [accessed 2/5/06], Baton Rouge, LA 708074-4490 USA
68. USDA. NRCS. Plant Material Center plant release brochure for *Festuca arizonica*, 'Redondo' cultivar, <http://www.plant-materials.nrcs.usda.gov/pubs/copmcrbfear2redo.pdf> [accessed 2/5/08], Upper Colorado Environmental Plant Center, Meeker, Co
69. USDA. NRCS. Plants Database Plant Fact Sheet for *Festuca californica*, [http://plants.usda.gov/factsheet/pdf/fs\\_feca.pdf](http://plants.usda.gov/factsheet/pdf/fs_feca.pdf) [accessed 2/5/08], Baton Rouge, LA 708074-4490 USA

70. USDA. NRCS. Plants Database Plant Guide for *Festuca idahoensis*, [http://plants.usda.gov/plantguide/pdf/pg\\_feid.pdf](http://plants.usda.gov/plantguide/pdf/pg_feid.pdf) [accessed 2/5/08], Baton Rouge, LA 708074-4490 USA
71. USDA. NRCS. Plants Database Plant Guide for *Glyceria striata/Glyceria elata*, [http://plants.usda.gov/factsheet/pdf/fs\\_glel.pdf](http://plants.usda.gov/factsheet/pdf/fs_glel.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA
72. USDA. NRCS. Plants Database Plant Guide for *Hilaria belangeri*, [http://plants.usda.gov/factsheet/pdf/fs\\_hibe.pdf](http://plants.usda.gov/factsheet/pdf/fs_hibe.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA
73. USDA. NRCS. Plants Database Plant Fact Sheet for *Melica nitens*, [http://plants.usda.gov/factsheet/pdf/fs\\_meni.pdf](http://plants.usda.gov/factsheet/pdf/fs_meni.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA
74. USDA. NRCS. Plants Database Plant Fact Sheet for *Muhlenbergia lindheimeri*, [http://plants.usda.gov/factsheet/pdf/fs\\_muli.pdf](http://plants.usda.gov/factsheet/pdf/fs_muli.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA
75. USDA. NRCS. Plants Database Plant Fact Sheet for *Muhlenbergia reverchonii*, [http://plants.usda.gov/factsheet/pdf/fs\\_mure2.pdf](http://plants.usda.gov/factsheet/pdf/fs_mure2.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA
76. USDA. NRCS. Plants Database Plant Fact Sheet for *Muhlenbergia rigens*, [http://plants.usda.gov/factsheet/pdf/fs\\_muri2.pdf](http://plants.usda.gov/factsheet/pdf/fs_muri2.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA
77. USDA. NRCS. Plant Material Center plant release brochure for *Muhlenbergia wrightii* 'El Vado' cultivar, <http://www.plant-materials.nrcs.usda.gov/pubs/nmpmcrbmuwrelva.pdf> [accessed 2/6/08], Los Lunas PMC, Los Lunas, NM
78. USDA. NRCS. Plants Database Plant Guide for *Nassella cernua*, [http://plants.usda.gov/plantguide/pdf/pg\\_nace.pdf](http://plants.usda.gov/plantguide/pdf/pg_nace.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA
79. USDA. NRCS. Plants Database Plant Fact Sheet for *Nassella leucotricha*, [http://plants.usda.gov/factsheet/pdf/fs\\_nale3.pdf](http://plants.usda.gov/factsheet/pdf/fs_nale3.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA
80. USDA. NRCS. Plants Database Plant Guide for *Achnatherum hymenoides*, [http://plants.usda.gov/plantguide/pdf/pg\\_achy.pdf](http://plants.usda.gov/plantguide/pdf/pg_achy.pdf) [accessed 2/6/08], Baton Rouge, LA 708074-4490 USA

81. USDA. NRCS. Plants Database Plant Fact Sheet for *Panicum obtusum*, [[http://plants.usda.gov/factsheet/pdf/fs\\_paob.pdf](http://plants.usda.gov/factsheet/pdf/fs_paob.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
82. USDA. NRCS. Plants Database Plant Fact Sheet for *Pappophorum bicolor*, [[http://plants.usda.gov/factsheet/pdf/fs\\_pabi2.pdf](http://plants.usda.gov/factsheet/pdf/fs_pabi2.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
83. USDA. NRCS. Plants Database Plant Fact Sheet for *Paspalum lividum*, [[http://plants.usda.gov/factsheet/pdf/fs\\_pali7.pdf](http://plants.usda.gov/factsheet/pdf/fs_pali7.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
84. USDA. NRCS. Plants Database Plant Fact Sheet for *Paspalum floridanum*, [[http://plants.usda.gov/factsheet/pdf/fs\\_pafi4.pdf](http://plants.usda.gov/factsheet/pdf/fs_pafi4.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
85. USDA. NRCS. Plants Database Plant Fact Sheet for *Paspalum plicatulum*, [[http://plants.usda.gov/factsheet/pdf/fs\\_papl3.pdf](http://plants.usda.gov/factsheet/pdf/fs_papl3.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
86. USDA. NRCS. Plants Database Plant Guide for *Poa fendleriana*, [[http://plants.usda.gov/plantguide/pdf/pg\\_pofe.pdf](http://plants.usda.gov/plantguide/pdf/pg_pofe.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
87. USDA. NRCS. Plants Database Plant Guide for *Poa secunda*, [[http://plants.usda.gov/plantguide/pdf/pg\\_pose.pdf](http://plants.usda.gov/plantguide/pdf/pg_pose.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
88. USDA. NRCS. Plants Database Plant Fact Sheet for *Spartina bakeri*, [[http://plants.usda.gov/factsheet/pdf/fs\\_spba.pdf](http://plants.usda.gov/factsheet/pdf/fs_spba.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
89. USDA. NRCS. Plants Database Plant Fact Sheet for *Spartina patens*, [[http://plants.usda.gov/factsheet/pdf/fs\\_sppa.pdf](http://plants.usda.gov/factsheet/pdf/fs_sppa.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
90. USDA. NRCS. Plants Database Plant Fact Sheet for *Poa arachnifera*, [[http://plants.usda.gov/factsheet/pdf/fs\\_poar.pdf](http://plants.usda.gov/factsheet/pdf/fs_poar.pdf)] [accessed 2/12/08], Baton Rouge, LA 708074-4490 USA
91. USDA. NRCS. Plants Database Plant Fact Sheet for *Spartina spartinae*, [[http://plants.usda.gov/factsheet/pdf/fs\\_spsp.pdf](http://plants.usda.gov/factsheet/pdf/fs_spsp.pdf)] [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA

92. USDA. NRCS. Plants Database Plant Guide for *Sporobolus airoides*, [http://plants.usda.gov/plantguide/pdf/cs\\_spai.pdf](http://plants.usda.gov/plantguide/pdf/cs_spai.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
93. USDA. NRCS. Plants Database Plant Fact Sheet for *Sporobolus cryptandrus*, [http://plants.usda.gov/factsheet/pdf/fs\\_spcr.pdf](http://plants.usda.gov/factsheet/pdf/fs_spcr.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
94. USDA. NRCS. Plants Database Plant Fact Sheet for *Sporobolus wrightii*, [http://plants.usda.gov/factsheet/pdf/fs\\_spwr2.pdf](http://plants.usda.gov/factsheet/pdf/fs_spwr2.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
95. USDA. NRCS. Plant Material Center plant release brochure for *Sporobolus wrightii* 'Falfurrias' germplasm, <http://www.plant-materials.nrcs.usda.gov/pubs/stpmcrb7441.pdf> [accessed 2/7/08], Kika de la Garza PMC, Kingsville, TX
96. USDA. NRCS. Plants Database Plant Guide for *Hesperostipa comata*, [http://plants.usda.gov/plantguide/pdf/pg\\_heco26.pdf](http://plants.usda.gov/plantguide/pdf/pg_heco26.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
97. USDA. NRCS. Plants Database Plant Guide for *Achnatherum occidentale*, [http://plants.usda.gov/plantguide/pdf/pg\\_acoc3.pdf](http://plants.usda.gov/plantguide/pdf/pg_acoc3.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
98. USDA. NRCS. Plants Database Plant Guide for *Achnatherum thurberianum*, [http://plants.usda.gov/plantguide/pdf/pg\\_acth7.pdf](http://plants.usda.gov/plantguide/pdf/pg_acth7.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
99. USDA. NRCS. Plants Database Plant Guide *Nassella viridula*, [http://plants.usda.gov/plantguide/pdf/pg\\_navi4.pdf](http://plants.usda.gov/plantguide/pdf/pg_navi4.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
100. USDA. NRCS. Plants Database Plant Fact Sheet for *Trichloris crinita*, [http://plants.usda.gov/factsheet/pdf/fs\\_chcr.pdf](http://plants.usda.gov/factsheet/pdf/fs_chcr.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
101. USDA. NRCS. Plants Database Plant Fact Sheet for *Trichloris pluriflora*, [http://plants.usda.gov/factsheet/pdf/fs\\_chpl2.pdf](http://plants.usda.gov/factsheet/pdf/fs_chpl2.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
102. USDA. NRCS. Plants Database Plant Fact Sheet for *Tridens flavus*, [http://plants.usda.gov/factsheet/pdf/fs\\_trfl2.pdf](http://plants.usda.gov/factsheet/pdf/fs_trfl2.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA

103. USDA. NRCS. Plants Database Plant Fact Sheet for *Tripsacum dactyloides*, [http://plants.usda.gov/factsheet/pdf/fs\\_trda3.pdf](http://plants.usda.gov/factsheet/pdf/fs_trda3.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
104. USDA. NRCS. Plants Database Plant Fact Sheet for *Zizaniopsis miliacea*, [http://plants.usda.gov/factsheet/pdf/fs\\_zimi.pdf](http://plants.usda.gov/factsheet/pdf/fs_zimi.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
105. USDA. NRCS. Plants Database Plant Fact Sheet for *Achnatherum lemmonii*, [http://plants.usda.gov/factsheet/pdf/fs\\_acle8.pdf](http://plants.usda.gov/factsheet/pdf/fs_acle8.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
106. USDA. NRCS. Plants Database Plant Fact Sheet for *Anthaenantia villosa*, [http://plants.usda.gov/factsheet/pdf/fs\\_anvi4.pdf](http://plants.usda.gov/factsheet/pdf/fs_anvi4.pdf) [accessed 2/11/08], Baton Rouge, LA 708074-4490 USA
107. USDA. NRCS. Plants Database Plant Fact Sheet for *Chloris cucullata*, [http://plants.usda.gov/factsheet/pdf/fs\\_chcu2.pdf](http://plants.usda.gov/factsheet/pdf/fs_chcu2.pdf) [accessed 2/11/08], Baton Rouge, LA 708074-4490 USA
108. USDA. NRCS. Plants Database Plant Fact Sheet for *Paspalum vaginatum*, [http://plants.usda.gov/plantguide/pdf/pg\\_pava.pdf](http://plants.usda.gov/plantguide/pdf/pg_pava.pdf) [accessed 2/12/08], Baton Rouge, LA 708074-4490 USA
109. USDA. NRCS. Plants Database Plant Fact Sheet for *Schizachyrium scoparium* var. *stoloniferum*, [http://plants.usda.gov/factsheet/pdf/fs\\_scscs3.pdf](http://plants.usda.gov/factsheet/pdf/fs_scscs3.pdf) [accessed 2/12/08], Baton Rouge, LA 708074-4490 USA
110. USDA. NRCS. Plants Database Plant Guide for *Elymus virginicus*, [http://plants.usda.gov/factsheet/pdf/fs\\_elvi3.pdf](http://plants.usda.gov/factsheet/pdf/fs_elvi3.pdf) [accessed 2/11/08], Baton Rouge, LA 708074-4490 USA
111. USDA. NRCS. Plants Database Plant Fact Sheet for *Aristida purpurascens*, [http://plants.usda.gov/factsheet/pdf/fs\\_arpu8.pdf](http://plants.usda.gov/factsheet/pdf/fs_arpu8.pdf) [accessed 2/13/08], Baton Rouge, LA 708074-4490 USA
112. USDA. NRCS. Plant Material Center plant release brochure for *Bouteloua rigidiseta* 'Atascosa' germplasm, <http://www.plant-materials.nrcs.usda.gov/pubs/stpmcrb7391.pdf> [accessed 2/13/08], Kika de la Garza PMC, Kingsville, TX
113. USDA. NRCS. Plants Database Plant Fact Sheet for *Leptochloa dubia*, [http://plants.usda.gov/factsheet/pdf/fs\\_ledu.pdf](http://plants.usda.gov/factsheet/pdf/fs_ledu.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA

114. USDA. NRCS. Plants Database Plant Fact Sheet for *Torreyochloa pallida* var. *pauciflora*, [http://plants.usda.gov/factsheet/pdf/fs\\_topap3.pdf](http://plants.usda.gov/factsheet/pdf/fs_topap3.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
115. USDA. NRCS. Plants Database Plant Fact Sheet for *Calamovilfa gigantea*, [http://plants.usda.gov/factsheet/pdf/fs\\_cagi3.pdf](http://plants.usda.gov/factsheet/pdf/fs_cagi3.pdf) [accessed 2/7/08], Baton Rouge, LA 708074-4490 USA
116. Leithhead, H., L. Yarlett and T. Shiflet. 1971. 100 Native Forage Grasses in Southern States Soil Conservation Service Handbook 389
117. Know Your Grasses Texas Extension Service B-182.
118. Grelan and Duvall. 1996. Common plants of longleaf pine-bluestem range Southern Forest Experiment Station. Forest Service.
119. Gould, F.W.. 1978. Common Texas grasses. Texas A & M U. Press.
120. Hatch S.L., J. Schuster and D. Drawe. 1999. Grasses of the Texas Gulf Prairies and Marshes Texas A & M U. Press.