



Spring Flood Tolerance of Selected Perennial Grasses

A Fact Sheet from the Jamie L. Whitten Plant Materials Center

Conservationists are often asked questions about the flood tolerance of various grasses. Such knowledge is essential in developing conservation planting plans in areas susceptible to early and late spring flooding. This becomes especially important in riparian buffer plantings where grass is used as part of the vegetative component or in bottomlands used as pasture for livestock. The following table lists the flood tolerance of several grasses that are contained in the field office technical guide and the Mississippi Planting Guide for various conservation uses. Also included are other grasses that occur in the southeastern U.S.

Spring flood tolerance of selected perennial grasses.

Grass	Flood Tolerance
Bermudagrass (<i>Cynodon dactylon</i>)	Very strong tolerance (20-30 days)
Reed canarygrass (<i>Phalaris arundinacea</i>)	Strong tolerance (10 to 20 days)
Switchgrass (cultivar Kanlow; <i>Panicum virgatum</i>)	Strong tolerance (10 to 20 days)
Beaked panicum (<i>Panicum anceps</i>)	Strong tolerance (10 to 20 days)
Florida paspalum (<i>Paspalum floridanum</i>)	Strong tolerance (10 to 20 days)
Tall fescue (<i>Lolium arundinaceum</i>)	Strong tolerance (10 to 20 days)
Virginia wildrye (<i>Elymus virginiana</i>)	Strong tolerance (10 to 20 days)
Big bluestem (cultivar Kaw; <i>Andropogon gerardii</i>)	Moderate tolerance (5 to 10 days)
Indiangrass (<i>Sorghastrum nutans</i>)	Moderate tolerance (5 to 10 days)
Johnsongrass (<i>Sorghum halepense</i>)	Moderate tolerance (5 to 10 days)
Eastern gamagrass (<i>Tripsacum dactyloides</i>)	Mild tolerance (5 days)
Purpletop (<i>Tridens flavus</i>)	Mild tolerance (5 days)
Weeping lovegrass (<i>Eragrostis curvula</i>)	Mild tolerance (5 days)

M.D. Gamble and Edd D. Rhoades. 1964. Effect of shoreline fluctuations on grasses associated with upstream flood prevention and watershed protection. Agron. J. 56:21-23.

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is the second of a
series of technical
information on
plant materials and
their role in the
conservation of our
natural resources.



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