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Ryegrass and Small Grain Cultivars for Central Florida

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Annual ryegrass and small grains (oats, rye, wheat, and triticale) are cool season grasses which can be an important source of forage during winter and early spring. These crops, seeded along or in mixtures after a vegetable crop or used in a pasture renovation program, can provide high quality forage which is quick to establish, provided adequate moisture is available. Both ryegrass and small grains seeded in cultivated soils establish more rapidly than when sod-seeded. Cultivated areas seeded to ryegrass and small grains can be grazed within 6 to 8 wk after seedling emergence and grazing may extend 90 days for small grains and 120+ days for ryegrass. Sod-seeded ryegrass and small grains normally require twice the nitrogen rate and produce half the yield of the same crop in cultivated soil. When allowed to grow and attain boot stage both ryegrass and small grains can be harvested for hay or silage in March yielding 1.5 to 2.0 tons of dry matter (DM)/A in a single harvest. This boot-stage harvested forage will average 15 to 20% crude protein and 70 to 75% digestibility.

Since new ryegrass and small grains are continually being released, it is important that these cultivars be tested under south-central Florida conditions. Ryegrass is generally selected over small grains by most central Florida growers, regardless if seeded in cultivated soil or under sod-seeded conditions. The popularity of ryegrass is due to lower seed costs/A, ability to tolerate variable management conditions, and a long winter/spring grazing period (120 to 125 days). However, ryegrass generally contains a lower percentage DM than small grains (12 vs.17%), especially during the early part of the grazing season (January-February). Cattle grazing ryegrass in January may be consuming as much as 90 to 92% water compared with small grains 83 to 85% water. Generally when testing ryegrass entries in central Florida, there is little difference between the

highest and lowest yielding cultivars. The better yielding cultivars consist of Wax Seed Co. 'Jackson'; CEBECO International Seeds, Inc. 'Gulf', 'Florida 80', and 'Surrey'; Smith Seed Services 'Big Daddy' and 'Jumbo'; and Rio. These recommended cultivars all produced 3.0 or more T of DM/A when averaged over multiple years. The cultivar Wax Seed Co. 'Marshall' is also a good yielder, however it develops a serious rust problem in central Florida. Irrigated ryegrass harvested in early March 2001, (4 wk regrowth, 12 in tall and 35 lb/A nitrogen) averaged 20 to 25% crude protein and 75% digestibility on a DM basis.

Small grains can also be grazed or used as a harvested forage. However grazing management is critical, since small grains will start heading in February and could develop heads at the expense of new tillers and die early, shortening the grazing season. Producers that want to remove their winter crop early to permit time for preparation of the next crop and yet receive a good yield from the winter annual should consider small grains, harvested at the boot stage.

Recommended cultivars harvested in a two (vegetative 12" and boot stage) cut system during 2001 averaged 1.5 to 2.5 T of DM/A with 80% of the yield obtained at the boot stage. This makes small grains more desirable than ryegrass in a one or two cut system and early removal. Small grains that have performed well in central Florida are 'Wrens 96' rye, 'Horizon 314' oats, 'Chapman' oats, 'Morey' wheat and 'Sunland' triticale. Growers that desire a February crop for haylage followed by late spring grazing should consider a combination of small grain and ryegrass.

If additional information is desired call 863-735-1314..