

## Ryegrass, Small Grains, and Tall Fescue<sup>1</sup>

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The cool-season grasses (ryegrass, rye, wheat, oats, triticale, and fescue) provide valuable winter and spring grazing when the warm-season perennial grasses are not growing. Cool-season grasses are high-quality forages and can be the main source of feed for the cow herd, or with the practice of "limit grazing," they can be used as a protein and energy supplement. The most efficient use of these grasses may be for younger animals that need a higher-quality forage than required by mature animals. Although expensive to plant and grow, in areas of the state where they can be grown successfully, they can be a less costly substitute for energy and protein supplements purchased off the ranch. Soil moisture (rainfall) is the key to successfully growing the cool-season grasses in Florida.

Cool-season forages require soils that are above average in soil moisture holding capacity. They can be grown on the heavier sandy loam and clay soils of north and northwest Florida, as well as certain flatwood sites throughout the state. Ryegrass can withstand some temporary flooding, while the small grains require soils with good water-holding

capacity—but also with good drainage—and that do not flood. Rye can be grown on slightly dryer sites than the other cool-season grasses, but all the cool-season grasses perform poorly on very sandy, dry sites.

The cool-season forage grasses can be grown more reliably in north and northwest Florida, where the rainfall pattern is more conducive to successful production than in peninsular Florida. From Ocala south, the risk of not having sufficient soil moisture to successfully establish and grow the cool-season grasses increases.

Planting on a clean-tilled seedbed compared to overseeding (sod seeding) usually results in grazable forage sooner and more total forage production. In peninsular Florida, planting on a prepared seedbed, and planting on the same day the soil is turned and the seedbed prepared, increases the chance of successful establishment. In years when cool-season rainfall is above average and evenly distributed, production from the cool-season grasses is above average.

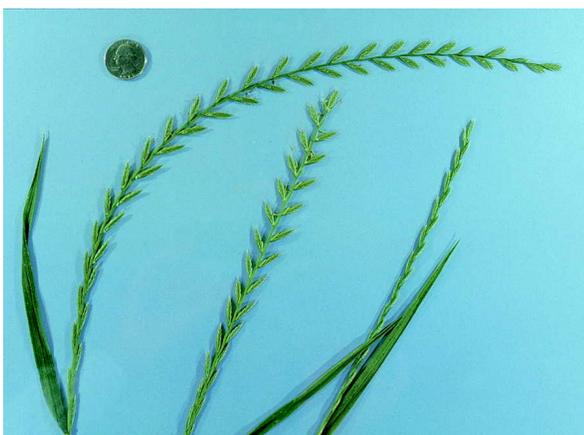
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## Ryegrass

Annual ryegrass (*Lolium multiflorum*) is a bunch grass that tillers profusely and has dark green, shiny, smooth leaves (Figure 1). It tolerates wet, poorly drained soils better than the small grains, is somewhat tolerant of moderate soil acidity, and is very responsive to nitrogen fertilization. The peak season of growth is later than that of rye, and a mixture of rye and ryegrass is widely used by cattlemen since it extends the grazing period of either forage planted alone. Ryegrass produces high-quality forage, tolerates close, continuous grazing, and gives excellent animal performance. It is mostly used as a grazing crop but may be used for hay or silage. Since some varieties do reseed well, ryegrass could become a pest plant in certain situations.



**Figure 1.** Ryegrass

Seeding dates for ryegrass are generally the same as for rye (Oct. 1 to Nov. 15). Ryegrass is often overseeded into dormant bahiagrass or bermudagrass at later dates than when planted on prepared land. In overseeded situations, forage production is later, and total forage production is less; however, overseeding has advantages for some producers. When planted on a clean-tilled seedbed with rye, ryegrass seedlings are very competitive, which allows them to survive the early competition from the fast-growing rye plants when planted as a mixture. The rye grows relatively fast in the fall, which provides grazing in early winter, but declines in growth in late winter as ryegrass begins its accelerated growth phase. Ryegrass production may last until late May to early June, depending on soil moisture and nitrogen management.

## Small Grains

The "small grains" include rye (*Secale cereale*), oats (*Avena sativa*), wheat (*Triticum aestivum*), barley (*Hordeum vulgare*), and triticale (*X Triticosecale* spp.). All small grain forages are high in quality and give good animal performance over their growing season when grazing is managed to keep the small grains in the vegetative stage of growth. When these grasses are underutilized and allowed to develop mature seed stems and heads, quality declines. All small grains respond well to nitrogen fertilization and require adequate phosphorus and potassium for maximum production. Fertilization practices are given in EDIS publication SS-AGR-176 *Fertilizing and Liming Forage Crops*. Planting dates and seeding rates are presented in EDIS publication SS-AGR-161 *Forage Planting and Establishment Methods*.

Rye is the most widely used of the small grains as a winter grazing crop. It is more tolerant of cold weather and soil acidity and generally produces more forage than other small grains. For these reasons, rye is generally considered to be the "most dependable" of the small grains as a forage crop. It is used mainly as a grazing crop and performs especially well with ryegrass as a companion crop to give a longer grazing season than either alone. If planted too early (before cool weather begins) seedling diseases often result in poor stands. Rye varieties developed in northern states are more cold-weather dormant and thus produce little forage in late fall to early winter. Northern varieties are often severely damaged by leaf diseases, compared to southern developed varieties selected for improved disease resistance.

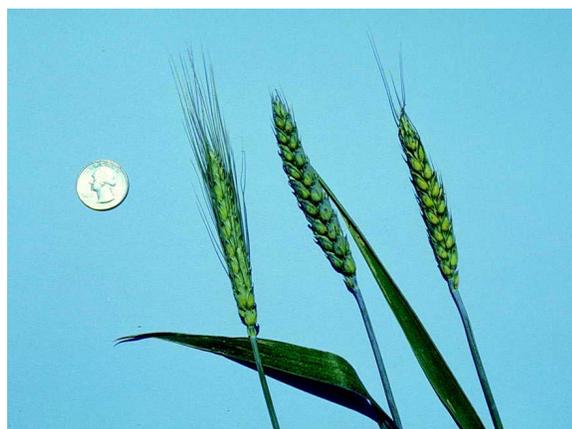
Oats (Figure 2) are generally the most cold-sensitive of the small grains, and in some years stand loss from severe cold greatly reduces forage growth, resulting in less available grazing. Oats may be planted earlier than the other small grains and thus may provide grazable forage earlier. Oats may be used for grazing, hay, or silage.

Wheat (Figure 3) is very similar to oats in forage yield but less susceptible to cold injury. Wheat may be used for grazing, hay, or silage. Only varieties resistant to Hessian fly should be planted. Wheat



**Figure 2.** Oats

cannot be planted as early as oats, but wheat may provide more forage later into the spring than either oats or rye.



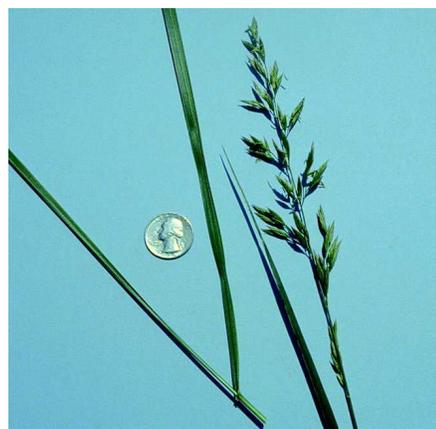
**Figure 3.** Wheat

Triticale is a relatively new crop—a "man-made" crop resulting from a cross between wheat and rye. It is very similar to wheat and is used similarly. Some varieties have been developed especially for grazing.

Barley is not generally used as a forage crop in Florida.

## Tall Fescue

Tall fescue (Figure 4), *Festuca arundinacea*, is a perennial, cool-season, long-living bunch grass adapted to a wide range of soils and climatic conditions. Leaves are distinctly ribbed and dark green with a shiny appearance. Although it is the most widely distributed perennial forage grass in the United States, it has generally not grown satisfactorily on sandy, Coastal Plain soils of the deep South.



**Figure 4.** Tall Fescue

In general, fescue should not be planted in Florida. A few producers have had limited success with the Ga-5 variety when planted on low, wet, clay soils in northwest Florida, but stands usually do not persist.

Variety considerations for Florida are updated annually and are available in EDIS publication *SS-AGR-84 2005 Fall Forage Update* (<http://edis.ifas.ufl.edu/AA266>). Special information about many Florida forages are also available on EDIS at: [http://edis.ifas.ufl.edu/TOPIC\\_Forage](http://edis.ifas.ufl.edu/TOPIC_Forage).