

Selection and Use of Cool-Season Forages

**Ann R. Blount¹, Ken H. Quesenberry², Ron D. Barnett³, Gordon M. Prine⁴,
and Yoana C. Newman⁵**

¹Associate Professor, North Florida Research and Education Center, UF/IFAS, Marianna, FL

²Professor, Agronomy Department, UF/IFAS, Gainesville, FL

³Professor Emeritus, North Florida Research and Education Center, UF/IFAS, Quincy, FL

⁴Professor, Agronomy Department, UF/IFAS, Gainesville, FL

⁵Assistant Professor, Agronomy Department, UF/IFAS, Gainesville, FL

Cool-season forages can supply excellent grazing for livestock in Florida. They are usually higher in total digestible nutrients and protein than our summer perennial grasses. The success of growing cool-season forages varies in Florida because of our warm climate and sandy soils. Planting and growing these forage crops can involve considerable expense and is somewhat risky because rainfall is often limiting during the fall months. Select varieties that are suitable for your location and needs, based on variety testing done in your area.

If you are planning on growing cool-season forages, mid-summer is the time to make variety selections and place orders for seed with a reputable seed source as soon as possible. Some cool-season forage seed may be in short supply, often due to adverse weather conditions where the seed crops were grown. If you purchase seed from a local distributor, check on the availability of the forages and, if possible, commit to a price per bag as seed prices often increase as the planting season begins.

UF/IFAS participates in forage variety testing at a number of locations in the state so that we may provide you with up-to-date recommendations on variety selection. Each year, we write an EDIS publication *FALL FORAGE UPDATE* and it is available on-line at <http://edis.ifas.ufl.edu/>.

The following describes many of the cool-season forages that might be considered for use in Florida.

Rye

The small grain most widely used for winter grazing. Rye is more cold tolerant than oat and generally

produces more forage than either oat or wheat. Do not plant too early; wait until cool weather begins. Normally rye from northern states will produce little forage in late fall or early winter and will usually be severely damaged by leaf rust; therefore, plant only varieties recommended for the Southeastern U.S.

Oat

May be planted and grazed earlier than rye. Oat is very palatable, but susceptible to freeze injury. In some years, certain varieties may be injured by Barley Yellow Dwarf Virus (BYDV).

Wheat

Similar to oat in forage yield and palatability. Wheat is less susceptible to freeze injury than oat. Wheat should not be planted for grazing before October 15. Plant only Hessian-fly-resistant varieties for grazing.

Ryegrass

A valuable winter and spring grazing crop for use on flatwoods soils or the heavier sandy loam soils in northwest Florida. Ryegrass may be seeded alone or with a small grain, such as rye and oat, on a prepared seedbed, or overseeded onto permanent grass pastures. Seeding ryegrass with a small grain crop will usually lengthen the grazing season.

Tall Fescue

In general, fescue should not be planted in Florida. It does not persist as a perennial, and as a cool-season annual, small grains and ryegrass are more productive. A few producers have had limited success with Ga-5 and Max Q when planted on low, wet, clay

soils in northwestern Florida.

White clover

Usually a winter annual but may act as a perennial under optimum soil fertility and moisture conditions. It is adapted to moist soils throughout Florida. Production and persistence can be limited by nematodes and other pests.

Red clover

A winter annual under Florida conditions and usually does not reseed itself. It will not tolerate flooding. Cherokee and Southern Belle were developed in Florida and both are non-dormant (earlier forage production) types that produce greater total-season forage yields than dormant varieties that were developed at northern locations.

Alfalfa

Usually grown as a winter annual in Florida, but may persist up to three years with optimum moisture and fertilization. Alfalfa is best used for haylage, green chopping, or hay. Alfalfa requires good management and high fertility. It will not tolerate flooding or a high water table. Acreage is low in Florida because of the cost of production and management requirements. There are only a few recommended varieties.

Crimson clover

A reseeding annual adapted to fertile well-drained soils. It has a relatively short grazing season, however seed is reasonably priced and crimson clover grows well in many Florida counties. It may be grown in combination with ryegrass or a small grain crop.

Arrowleaf clover

An annual that is similar to crimson clover in soil adaptation, management, and fertility requirements. It is mainly grown on heavier soils in northwestern Florida. It makes more growth in late spring than crimson clover.

Lupine

An annual plant adapted to well-drained soils in

northern and western Florida. It is an excellent cover crop. In recent years seed supply has been low and forage production has been limited by diseases and insects. Only sweet varieties are suitable for forage.

Sweetclover

Grows on slightly drier soils than white clover. It will not tolerate flooding. It has an earlier, but shorter grazing season than white clover. It should be reseeded each year. Low coumarin cultivars are being developed for the southeastern U.S.

Austrian winter peas

Best suited to well-drained soils with a high clay content. There is no recommended variety and “common” seed is usually grown.

Vetch

Grows best on well-drained, fertile, loamy soils. It has not generally been highly productive in Florida.

Considerations

- Planting cool-season forages on a clean-tilled seedbed will result in earlier and more total production compared to overseeding on a grass sod. If overseeding bahiagrass, the sod should be disked or chopped for 30 to 50 percent disturbance. For overseeding bermudagrass, a pasture drill or no-till drill can be used alone. Excess warm-season forage should always be removed as hay or by grazing before planting the cool-season forage. Recent experience suggests that planting of cool-season annual grasses on bahiagrass should be delayed until mid-November or later.
- Successful establishment of winter pastures depends on rainfall. This is especially true when overseeding.
- In central and south peninsular Florida, sod seeding (overseeding) of cool-season annuals into an established grass sod often fails due to insufficient soil moisture and this is generally not recommended unless irrigation is available.

- Look for opportunities to plant on a clean-till seedbed, such as following vegetables or a row crop, after lifting sod, or in a pasture renovation program where the sod is plowed or turned under.

- In south central Florida, small grains and ryegrass have been successfully grown on flatwoods in a pasture renovation program. If the sod is turned (late October-early November), the soil harrowed, planted, and packed the same day, there will usually be enough moisture conserved to establish the new planting. If equipment and labor does not allow for such a rapid progression of work, then it may be best to turn the sod and then disk in early- to mid-October and wait for a good rain before planting.

- Winter legumes are more dependable on the heavier clay soils of northwestern Florida or on sandy soils that are underlain by a clay layer compared to deep upland sands or sandy flatwoods. However, white clover and ryegrass overseeded can also be grown successfully on certain flatwood areas in northeast Florida and south central Florida where the soil remains moist throughout the growing season. Do not forget to add the correct inoculant (nitrogen fixing bacteria) to the legume seed before planting.

- Should you need additional help with selecting or locating cool-season forages for your operation or have questions about their management, contact your local county agent. Also visit our on-line extension publications for more in-depth information on planting dates and seeding rates at our EDIS site previously mentioned.

Notes: