

2014 Cool-Season Forage Variety Recommendations for Florida¹

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Introduction

Warm-season pasture grasses used in Florida become dormant in late fall and winter because of cooler temperatures and frosts. Many livestock producers may choose to establish cool-season annual pasture species to supplement their forage production. These plants are usually higher in total digestible nutrients (TDN) and protein (CP) than summer perennial grasses. Planting and growing these forage crops can involve considerable expense and is somewhat risky because rainfall is often unpredictable during the fall establishment period. The species and varieties available for potential use vary in the distribution of production during the cooler months and in the type of soils where they are best adapted.

This publication provides the most up-to-date information on current adapted varieties of cool-season forages. The recommendation of varieties is based on multi-location, multi-year cultivar evaluation experiments that may include trials in Georgia and other states. Table 1 includes information about the planting dates, seeding rates, and other

considerations. If you have questions about a particular variety, contact your local UF/IFAS Extension agent for additional information (<http://solutionsforyourlife.ufl.edu/map/>).

Recommended Cultivars (Varieties) Alfalfa

Alfalfa is usually grown as a winter short-term perennial in Florida. Alfalfa is used for haylage, green chopping, or hay. Alfalfa requires good management. It is not tolerant of flooding or soils with high water tables and requires a soil pH of 6.5 or greater. Alfalfa is not widely cultivated in Florida because it is difficult to produce timely hay cuttings with Florida's humid conditions. However, the cost of producing alfalfa haylage and silage has decreased in recent years, and this has made it a viable and cost effective option as a high quality, conserved legume forage.

Recommended varieties: AmeriStand 901 and Bulldog 805.

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Clover, Arrowleaf

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

Recommended varieties: Apache (for North and Central Florida), Blackhawk, and Yuchi. Apache has improved virus resistance compared to Yuchi.

Clover, Ball

Ball clover grows on a wide range of soil types. Although it is well adapted, it is not considered to be a highly productive forage in Florida.

Recommended varieties: Don and Grazer Select. Pre-inoculated seed is available in 2014.

Clover, Berseem

Berseem clover has low bloat potential and is well adapted to many soil types in Florida, including more alkaline and wet soils. Care should be given to the management of berseem clover when grazed. It is advisable to graze at about 10 inches and leave a 3–4 inch stubble height.

Recommended varieties: Bigbee.

Clover, Crimson

This clover is a reseeding annual adapted to fertile well-drained soils. It has a relatively short grazing season. Crimson clover may be grown in combination with ryegrass or a small grain crop.

Recommended varieties: AU-Robin (seed may be limited in 2014) and Dixie.

Clover, Red

Red clover behaves as a winter annual under Florida conditions and usually does not reseed itself. It does not tolerate poorly drained soils. Red clover provides long-season forage production in North Florida.

Recommended varieties: Barduro (mid-dormant), Red Ace, and Southern Belle (non-dormant). Southern Belle was developed in Florida and is a non-dormant red clover. It offers earlier forage production and greater total-season forage yields than more dormant varieties. Barduro is a new UF red clover cultivar that is a mid-dormant type. Bulldog Red is also marketed in the southeastern United States but data is limited on its performance in Florida.

Clover, White

White clover is 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 of white clover can be limited by nematodes and other pests.

Recommended varieties: Louisiana S-1, Ocoee (developed in Florida), Osceola (developed in Florida), Regal Ladino, and Regalgraze. Durana is also well adapted and has a prostrate growth habit and lower initial forage yields, but persists well under grazing.

Fescue, Tall

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

Recommended varieties: Max Q II and Texoma endophyte-friendly fescue where adapted.

Lupine

Lupine is an annual plant adapted to well-drained soils in northern and western Florida. It is an excellent cover crop. Seed supply has been low in recent years, and forage production has been limited by diseases and insects. Only sweet lupine varieties are suitable for forage.

Recommended varieties: Tifblue. Frost and Tifwhite are also recommended; however, commercial seed production of these lupine varieties has been limited and seed is currently unavailable.

Medic

Medics are small seeded legumes that grow on a wide range of soil types. Although they are well adapted, they are not considered to be highly productive forages in Florida.

Recommended varieties: Armadillo burr and Devine little burr. Pre-inoculated seed is available in 2014.

Oat

Oat is very palatable, but is susceptible to freeze injury. Oat may be planted and grazed earlier than rye. Horizon 201 and RAM LA 99016 are excellent forage types that have improved crown rust resistance, winter hardiness, and good grain production. In 2013, a new strain of crown rust was identified on all commercially available eastern oat varieties and symptoms ranged from mild infection to early plant senescence. We do not know how prevalent this rust will

occur in 2015, so oat plantings may need to be scouted for rust and treated with fungicide applications, particularly if grown for silage or grain. In some years, some varieties, such as NK-Coker 227, may be injured by Barley Yellow Dwarf Virus (BYDV).

Recommended varieties: Horizon 201, Horizon 306, RAM LA 99016, and Plot Spike LA 9339 (mainly for wildlife use).

Peas, Austrian Winter (Common)

This annual legume is best suited to well-drained soils with high clay content.

Recommended varieties: Common, although new varieties for Florida, Maple and Whistler, appear promising.

Rye

Rye is the small grain most widely used for winter grazing. Rye is more cold tolerant than oats and generally produces more forage than either oats or wheat. If rye is planted very early in the season, there may be a decreased stand caused by various seedling diseases. Normally rye developed from northern states produces little forage in late fall or early winter and usually is severely damaged by leaf rust; therefore, only plant varieties recommended for the southeastern United States.

Recommended varieties: AGS 104 (seed availability may be limited), Bates RS4, Oklon, FL 401 (for early grazing or use in blends), and Wrens Abruzzi.

Ryegrass

Ryegrass is 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 on a prepared seedbed or overseeded onto permanent grass pastures. Seeding ryegrass with a small grain crop lengthens the grazing season. (NOTE: Few differences were found between early and late variety performance in the 2013-2014 season of production)

Early recommended varieties: Attain, Big Boss, Diamond T, Earlyploid, Jackson, Marshall, Nelson, Prine, and TAM-TBO, (Jackson and Marshall are susceptible to rust and gray leaf spot.)

Late recommended varieties: Attain, Big Boss, Diamond T, Earlyploid, Jackson, Jumbo, Marshall, Nelson, Prine, and TAMTBO, (Jackson and Marshall are susceptible to rust and gray leaf spot.)

Season-long recommended varieties: Attain, Big Boss, Diamond T, Earlyploid, Jackson, Jumbo, Marshall, Nelson, Prine, Rio, and TAMTBO, (Jackson and Marshall are

susceptible to rust and gray leaf spot.) These varieties were selected based on their recent three-year, multi-location performance. Other ryegrass varieties, such as Beefbuilder III, Big Daddy, Brigadier, Ed, Fantastic, Florlina, Flying A, Fria, Graze-N-Gro, King, Ocala, Passeral Plus, Rio, Surrey II, TAM 90, and Verdure have also performed well in regional trials. Other new varieties may be suitable but have not been adequately evaluated in Florida.

Sweetclover

Sweetclover grows on slightly drier soils than white clover. It will not tolerate flooding. Sweetclover has an earlier but shorter grazing season than white clover. Sweetclover should be reseeded each year.

Recommended varieties: None at present. New varieties should be commercially available shortly.

Triticale

Triticale is a cross between wheat and rye. It is well adapted to the southern United States and peninsular Florida. Triticale has the forage quality of wheat and the excellent disease resistance of rye. Triticale does not respond well to close grazing and therefore is recommended for haylage or silage if grown alone. If used for grazing, consider blending with ryegrass to promote a longer growing season.

Recommended varieties: Monarch and Trical 342.

Vetch

Vetch grows best on well-drained, fertile, loamy soils. Although it is well adapted, it is not considered to be a highly productive forage in Florida.

Recommended varieties: AU-Early Cover (seed may be unavailable in 2014), Cahaba White, Hairy, and Nova II. Commercial seed production of most vetch varieties will be limited in 2014.

Wheat

Wheat is 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, and take caution to plant only Hessian-fly-resistant varieties for grazing.

Recommended varieties: AGS 2038 and SS8641.

Remember the Following:

- Planting cool-season forages on a clean-tilled seedbed results in earlier and more total forage production compared to overseeding on grass sod. If overseeding on

bahiagrass, the sod should be disked to 30% disturbance. For overseeding on 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.

- Success of winter pastures depends on adequate 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 because of insufficient soil moisture and warm-season grass competition. Sod seeding is generally not recommended unless irrigation is available or rainfall is adequate.
- 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 with a moldboard

plow (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 adequate rainfall before planting.

- Winter legumes are more dependable on the heavier clay soils of northwestern Florida or on sandy soils 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 flatwoods soils in northeast Florida and south central Florida where the soil remains moist throughout the growing season.
- Remember to add the correct inoculant (nitrogen-fixing bacteria) to the legume seed before planting. Coated (already pre-inoculated) seed is sometimes available, but seed coatings with bacteria have a limited shelf life and may be costly when compared to purchasing raw seed and inoculant separately and mixing just prior to planting.

Table 1. Planting dates, seeding rates, planting depths, and grazing parameters for certain cool-season forage crops.

Seed-propagated crops ¹	Planting dates ²	Seeding rates (lb/A broadcast)	Seeding depth (in)	Grazing height (in)		Rest period
				begin	end	
Alfalfa	Oct. 1 - Nov. 15	15-20	1/4-1/2	10-16	3-4	Hay: 35-40 Grazing: 15-30
Clover, Arrowleaf	Oct. 1 - Nov. 15	8-12	0-1/2	8-10	3-5	10-20
Clover, Ball	Oct. 1 - Nov. 15	2-3	0-1/4	6-8	1-3	7-15
Clover, Berseem	Oct. 1 - Nov. 15	15-20	1/4-1/2	8-10	3-5	10-20
Clover, Crimson	Oct. 1 - Nov. 15	20-25	1/4-1/2	8-10	3-5	10-20
Clover, Red	Oct. 1 - Nov. 15	10-15	1/4-1/2	8-10	3-5	10-20
Clover, Subterranean	Oct. 1 - Nov. 15	15-20	1/4-1/2	6-8	1-3	7-15
Clover, White	Oct. 1 - Nov. 15	3-4	0-1/4	6-8	1-3	7-15
Fescue, Tall	Nov. 1 - Dec. 15	20-25	1/4-1/2	4-8	2-3	15-30
Medic	Oct. 1 - Nov. 15	10-15 rates differ	0-1/4	6-8	1-3	7-15
Oats for forage	Sept. 15 - Nov. 15	100-120	1-2	8-12	3-5	7-15
Pea, Austrian Winter	Oct. 1 - Nov. 15	40-60	1/2-1	Poor grazing tolerance. Better suited as a hay or silage crop.		
Rye for forage	Oct. 15 - Nov. 15	90-120	1-2	8-12	3-4	7-15
Ryegrass, Italian (annual)	Oct. 1 - Nov. 15	20-30	0-1/2	6-12	3-4	7-15
Sweetclover	Oct. 1 - Nov. 15	10-15	1/4-1/2	8-10	3-5	10-20
Turnips	Oct. 1 - Nov. 15	5-6	1/4-1/2	6-8	2-3	varies
Vetch, hairy	Oct. 1 - Nov. 15	20-30	1-2	6-8	3-4	varies
Wheat for forage	Oct. 15 - Nov. 15	90-120	1-2	8-12	3-5	7-15
Triticale for silage or use in blends	Oct. 15 - Nov. 15	90-120	1-2	Harvest for silage at milk or soft dough stage of maturity.		

¹ Always check seed quality. Seed germination should be 80% or higher for best results.
² Planting date range: in general, cool-season forage crops in northern Florida can be planted in the early part of the planting date range and in southern Florida, in the latter part of the planting date range.