

Forage Crops Commonly Grown in Georgia

Forage Crop	Seeding Rate (lb/acre) B: Broadcast D: Drill	Seeding Depth (in.)	Planting Date			Remarks
			Mountains	Piedmont	Coastal	
Warm-season Perennial Grasses						
<i>Bahiagrass</i>		¼ - ½	--	Mar – Apr	Mar – Apr	Adapted to sandy soils; tolerates drought and poor drainage; best planting results are achieved using a no-till sod drill on prepared ground
▪ Pensacola	B: 18 – 20 D: 12 – 15					
▪ Tifton 9, TifQuick	B: 12 – 15 D: 8 – 10					Higher yields and improved seedling vigor
<i>Bermudagrass – common</i> (hulled)	B/D: 5 – 10	0 - ½	--	Apr – Jun	Mar – Jun	All soil textures; tolerates drought; responds to nitrogen; potassium is important for survival and production
<i>Bermudagrass - hybrid</i>			Mar – May	Feb – Apr	Jan – Apr	All soil textures; tolerates drought; responds to nitrogen; potassium is important for survival and production; spring through July if under irrigation
▪ Sprigged in rows	10 bu/ac	upper 2” exposed				
▪ Sprigs broadcast	25 – 40 bu/ac	Covered				
▪ Sprigs no-tilled	20 – 25 bu/ac	upper 2” exposed				
<i>Big bluestem</i>	B: 10 – 12 PLS D: 5 – 10 PLS	¼ - ½	Apr – May	Apr – May	Apr – May	Drought tolerant; requires rotational stocking; slow to establish
<i>Dallisgrass</i>	B: 15 PLS D: 10 PLS	¼ - ½	--	Mar – Apr	Mar – Apr	Adapted to clay and loam soils with good summer moisture. Ergot infection of seedheads can lead to the condition “dallisgrass staggers”
<i>Eastern gamagrass</i>	D: 10 – 12 PLS	½ - ¾	May – Jun	May – Jun	Apr – May	Requires rotational stocking; slow to establish
<i>Indiangrass</i>	B: 10 – 12 PLS D: 6 – 10 PLS	¼- ½	Apr – May	Apr – May	Apr – May	Requires rotational stocking; slow to establish. Later maturing
<i>Switchgrass</i>	B: 10 – 12 PLS D: 5 – 6 PLS	¼ - ½	Apr – May	Apr – May	Apr – May	Drought tolerant; tolerates poorly drained soils; requires rotational stocking

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Warm-Season Annual Grasses						
<i>Browntop millet</i>	B: 25 – 30 D: 15 – 20	½ - 1	Apr – Aug	Apr – Aug	Apr – Aug	Less productive than pearl millet or sorghum-sudan hybrids. Nitrate accumulation can cause toxicity
<i>Crabgrass</i>	B/D: 4 – 6	¼ - ½	Mar – May	Mar – May	Mar – May	High quality summer annual, not drought tolerant.
<i>Pearl millet</i>	B: 25 – 30 D: 10 – 15	0 – ½	Apr – Jun	Apr – Jun	Apr – Jun	Best adapted on sandy soils, tolerant of drought and soil acidity; nitrate accumulation can cause toxicity
<i>Forage Sorghum</i>	B: 15 – 20 D: 4 – 6	1 – 2	May – Jun	May – Jun	Apr – Jun	Very drought tolerant; not tolerant of highly acid soils
<i>Sorghum x Sudan hybrids</i>	B: 30 – 40 D: 20 – 25	1 - 2	May – Jun	May – Jun	Apr – Jun	Very drought tolerant; not tolerant of highly acid soils
<i>Sudangrass</i>	B: 30 – 40 D: 20 – 25	½ - 1	May – Jun	May – Jun	Apr – Jun	Very drought tolerant; not tolerant of highly acid soils
Cool-season Perennial Grasses						
<i>Orchardgrass</i>	B: 15 – 20 D: 12 – 15	½ - 1 ½	Sep	Sep Upper Piedmont Only	--	Less tolerant of drought, poor drainage, and close grazing than tall fescue.
<i>Tall fescue</i>	B: 20 – 25 D: 15 – 20	¼ - ½	Sep – Oct or Mar – Apr	Sep – Oct	--	Adapted to clay and loam soils; Endophyte-infected varieties can cause Fescue Toxicosis; novel endophyte varieties recommended; manage summer grazing carefully.
Cool-Season Annual Grasses						
<i>Ryegrass</i>	B: 25 – 30 D: 20 – 25	0 – ½	Sep – Oct	Sep – Oct	Sep – Nov	Tolerates wet, poorly drained soil; can be managed to re-seed
<ul style="list-style-type: none"> ▪ Planted alone ▪ Mixtures 	B: 15 – 20 D: 10 – 15					
<i>Small grains (rye, oats, wheat, barley, triticale)</i>	B/D: 90–120	1 – 2	Sep – Oct	Sep – Oct	Sep – Nov	Rye is more tolerant of soil acidity than wheat or oats; Oats is cold sensitive and subject to winterkill; responsive to N and require adequate P & K
<ul style="list-style-type: none"> ▪ Planted Alone ▪ Mixtures 	B: 90 D: 60					

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Warm-season Perennial Legume						
<i>Perennial peanut</i>	80 – 120 bu/ac rhizomes	2 – 4	--	--	Dec - Mar	Adapted to well-drained, sandy soils in lower half of Coastal Plain (Tift County and south); very slow to establish; do not graze during first establishment year; low fertility requirement;
<i>Sericea lespedeza</i>	B: 20 – 30 D: 15 – 20	¼ - ½	Mar – May	Mar – May	Mar – Apr	Drought tolerant; best on clay or loam soils; tolerant of soil acidity and low fertility; low-tannin varieties are available; slow to establish
Warm-season Annual Legume						
<i>Annual lespedeza</i>						Tolerant of soil acidity and low soil fertility; can be managed to re-seed
▪ <i>Striate</i>	B: 25 – 30 D: 15 – 20	¼ - ½	Feb – Apr	Feb – Apr	Feb – Mar	
▪ <i>Korean</i>	B: 25 – 30 D: 15 – 20	¼ - ½	Feb – Apr	Feb – Apr	--	
<i>Forage Soybean</i>	B/D: 60 – 100	1 – 3	May	May	May	No regrowth after initial defoliation
Cool-season Perennial Legumes						
<i>Alfalfa</i>	B: 22 – 25 PLS D: 18 – 25 PLS	¼ - ½	Sep - Oct (preferable) or Mar – Apr	Sep – Oct	Oct – Nov	Requires well-drained soil with pH 6.5+; drought tolerant; sensitive to potassium, boron and molybdenum deficiencies. Can be sod seeded into bermudagrass with appropriate management
<i>Red clover</i> ▪ Solid stand, mixtures	B: 12 – 15 PLS D: 8 – 12 PLS	¼ - ½	Sep – Oct or Feb – Mar	Sep – Oct	Oct – Nov	Short-lived; long growing season; fairly tolerant of drought; acts as an annual in the Coastal Plain
<i>White or Ladino clover</i> ▪ Solid stand, mixtures	B/D: 2 – 3 PLS	0 – ¼	Sep – Oct or Feb – Mar	Sep – Oct	Oct – Dec	Tolerant of moderate soil acidity and wet soils; survives under drought conditions; in mixtures with cool-season perennial grasses

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Cool-season Annual Legumes						
<i>Arrowleaf clover</i> ▪ Solid stand, mixtures	B: 8 – 10 PLS D: 5 – 7 PLS	0 – ½	--	Sep – Nov	Oct - Nov	Requires well-drained soil; plant only scarified seed; reseeds well; not tolerant of soil acidity or low fertility
<i>Ball clover</i> ▪ Solid stand, mixtures	B/D: 2 – 3 PLS	0 – ¼	--	Sep – Oct Lower Piedmont Only	Oct - Nov	Good natural reseeder; adapted to loam & clay soils; tolerant of poor drainage; bloat can be a problem; tolerates heavy grazing
<i>Crimson clover</i> ▪ Solid stand	B: 20 – 30 PLS D: 15 – 20 PLS	¼ - ½	--	Aug – Oct	Oct - Nov	Not tolerant of poorly drained soils; moderately tolerant of soil acidity; more productive under low temperatures than most clovers
▪ Mixtures	B: 12 – 20 PLS D: 10 – 15 PLS					
<i>Rose clover</i>	B: 20 – 25 PLS D: 15 – 20 PLS	¼ - ½	--	Sep – Oct	Oct - Nov	Good natural reseeder if livestock removed by mid-April; tolerant of drought & low soil fertility; adapted to soil pH 6 – 7
<i>Subterranean clover</i>	B: 10 – 20 PLS D: 8 – 10 PLS	¼ - ½	--	Sep – Oct	Oct - Nov	Adapted to well-drained soils; lower yielding than crimson or arrowleaf clover; tolerant of soil acidity, close continuous stocking, & shade
<i>Hairy Vetch</i>	B: 20 – 25 PLS D: 15 – 20 PLS	1 – 2				Requires well-drained soil; tolerant of soil acidity; need adequate phosphorous do not graze until plants are at least 6" tall; plant small grain at 60 lb/acre as companion crop
<i>Winter Pea</i>	B: 30 – 35 PLS D: 20 – 25 PLS	1 – 2	Sep – Oct	Sep – Oct	Sep – Oct	Adapted to well-drained loam or sandy loam soils; seed at 20 – 30 lb/A if planted with a small grain; does not tolerate highly acid soils; suited for use as silage or green manure
Forage Brassicas						
<i>Turnips and Radishes</i>	B/D: 1 – 6	0 – ½	Aug - Oct	Aug - Oct	Aug - Oct	Fall forage available in 45-60 days. Several varieties available. Should only be limit grazed as supplement to other lower quality roughage

Determining Pure Live Seed (PLS) –

The percentage of pure live seed is an indicator of seed quality. It is often used in connection with seeding rate recommendations for species which typically have relatively low germination rates, or frequently contain a substantial amount of inert material. If not specified on the label, PLS can be calculated if purity and germination are known.

Example – Assume a bag of seed has a purity of 97.5% and the germination is 70%. PLS is determined by multiplying the purity by the germination and dividing the product by 100. In this example PLS is calculated as: $(97.5 \times 70) \div 100 = 68.25\%$

In order to calculate the amount of seed needed per acre, the PLS recommended seeding rate should be divided by the calculated PLS percentage and multiplied by 100. If the PLS recommended seeding rate is 10 lbs. of PLS/A, and the calculated PLS percentage is 68.25, the amount of seed that should be planted per acre is: $(10 \div 68.25) \times 100 = 14.65$ lb. **14.65 lb. of the material taken from the bag needs to be planted in order to achieve the 10 lb PLS/A recommended seeding rate.**