

LUPIN, BLUE (Lupinus angustifolius L.)

Blue lupin was a traditional cover crop in the South and it is adapted to the lower Coastal Plain. Under the right conditions, it can produce good biomass and nitrogen. Some varieties have alkaloids that are toxic to livestock. "Sweet" (low alkaloid) cultivars should be used in mixed row crop/livestock operations where the cover crop might be grazed.

Recommended Varieties

Variety	Reasons Why	Source
TIFBLUE-78	A low-alkaloid "sweet" blue lupin. Can be used in mixed row crop/livestock operations. Sweet lupins are attractive to wildlife.	Managing Cover Crops Profitably
Narrow-leaf sweet blue lupin VNS	High biomass reported - 7,000 - 8,000 lbs dry biomass/acre.	Bill Anderson – personal communication, Jimmy Carter Plant Materials Center data, Scully et al. 2012

Planting Information

Information		Comments	Source
Drilled Seed	No deeper		Managing Cover Crops Profitably
Depth (inches)	than 1 inch		
Drilled Seeding	50 - 90	Use Rhizobium lupini inoculant.	Managing Cover Crops
Rate (lbs/acre)			Profitably, USDA White Lupin
			Plant Guide
Broadcast	60 - 100	Difficult with large seed and good moisture is	USDA White Lupin Plant Guide
Seeding Rate		needed.	
(lbs/acre)			
Aerial Seeding	N/A		
Rate (lbs/acre)			

Termination Information

Information	Source
Blue lupin can be terminated with herbicides, rolling and crimping, mowing, or tillage. The hollow stems crush or break readily, making it easy to plant cash crops using conservation tillage equipment.	Managing Cover Crops Profitably
Consult your local Extension and state Pest Management Handbook for herbicide recommendations. Always follow the herbicide label.	

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Cultural Traits

Traits		Comments	Source	
Typical Dry Matter	5,000 - 6,000		Jimmy Carter Plant Materials	
Range (lbs/acre)			Center data	
Typical Total N	100 - 150		Managing Cover Crops	
Range (lbs/acre)			Profitably	
Life Cycle	Cool season	Blooms in March in south Georgia.	USDA White Lupin Plant Guide	
	annual			
	legume			
Growth Habit	Upright			
Preferred Soil pH	5.6 - 7.5		USDA White Lupin Plant Guide	
Relative Seed Cost	\$\$\$\$		Based on survey of seed costs	
(\$/acre)			using maximum price and max	
			seeding rate	
Min. Germination	N/A			
Temp (F)				
Cautions	Use with caution before peanuts or soybeans because lupin Managing Cover Crops			
	is host for white mold. Lupins should be rotated with small Profitably			
	grains due to susceptibility to viral and fungal diseases.			

Sources:

Jimmy Carter Plant Materials Center Annual Reports:

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ga/plantsanimals/?cid=nrcs144p2 022076

Managing Cover Crops Profitably: https://www.sare.org/Learning-Center/Books

Scully, B.T., T.M. Webster, D.M. Olson, R.F. Davis, T.C. Strickland, J.E. Knoll and W. A. Anderson. TAPPI presentation. Integration of Sorghum as a Biofuel Species into Cropping Systems for the Southeastern U.S.

USDA White Lupin Plant Guide: https://plants.usda.gov/plantguide/pdf/pg_lual22.pdf