



## GROWING WINTER ANNUAL FORAGES

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Just like summer annuals, winter annual forages are an excellent tool for bridging the production gaps left by perennial forages systems. The most common grasses, legumes, and forbs grown for winter annual forage production in Georgia are detailed in Table 1. Several other forages are available but are not broadly recommended for use in Georgia. These species can be expensive or difficult to establish, provide relatively low yields, and/or are not tolerant to grazing.

### **Planting guidelines**

Do not plant too early, especially in the southern portions of Georgia. Seedling diseases such as Phytophthora, Rhizoctonia, Pythium, and others reduce stands when planted in the warmer weather. Wait until the nighttime temperatures are consistently cooling down prior to planting.

Consider planting multiple forages on your farm to extend the grazing or harvest season. Rye is the earliest maturing winter annual and provides the most aggressive fall growth. Triticale is second, followed by oats, and then wheat. Ryegrass has early, late, and season long varieties. However, even the early varieties are not as early as rye.

Please visit the Georgia Forages webpage for updated variety information for the 2025 planting season.

While there is limited research available for late planted cool season annuals, it can be assumed that yield decreases dramatically with later planting dates. Late fall plantings rarely see yields above 4,000 pounds per acre. Winter plantings will generally not produce more than 2,000 pounds per acre.

### **Planting methods**

If there is risk of soil erosion or you are overseeding warm-season grass pastures, then use no-till planting method. Also, the no-till planting method can be used as a smother



**Table 1.** General planting information for species used for cool season annual forage grasses.

	<u>Planting rate (pounds/acre)<sup>1</sup></u>		Planting depth (inches)
Species	Pure stand	Mixture	
<b><i>Cool season annual grasses</i></b>			
Annual ryegrass (diploid or tetraploid)	20-25	15-25	¼ - ½
Oat	90-120	60-90	½ - 1
Rye	90-120	60-90	½ - 1
Triticale	90-120	60-90	½ - 1
Wheat	90-120	60-90	½ - 1
<b><i>Cool season annual legumes</i></b>			
Arrowleaf clover	5-8	5-6	¼
Ball clover	2-3	1-2	¼
Berseem clover	15-18	10-15	¼
Crimson clover	15-25	10-12	¼
<b><i>Cool season annual forbs</i></b>			
Brassicas (diploid or tetraploid)	3-4	NR <sup>2</sup>	¼

crop in tall fescue renovation plans. Do not plant winter annual forages into tall fescue fields unless you are pursuing renovation.

If there is minimal risk of soil erosion or no perennial sod in place, then a conventional seedbed may be used. The Web Soil Survey is an excellent resource available for free online to learn more about the soil type, topography, slope, etc. of your farm.

### Fertilizing guidelines

Apply 40-50 pounds of nitrogen per acre soon after the annual grasses emerge and a second application of 40-50 pounds of nitrogen per acre in mid-winter to increase winter and spring forage production. Ryegrass may require a third application of 40-50 pounds

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of nitrogen per acre in early spring since it is longer lived than small grains. Annual legumes should only require one application of nitrogen to promote early growth before nitrogen fixation is initiated. Apply phosphorous and potassium based on soil test recommendations after emergence.

The fertilization schedule may need to be adjusted during warm winters or during periods of unseasonably cold weather. Fresh, tender growth that occurs after nitrogen applications is especially prone to damage during cold weather.

### **Grazing recommendations**

Regardless of species, rotational grazing is strongly recommended for use in annual forage fields. Initiate grazing once forage species planted have reached a minimum of 4–6 inches of growth and are well-rooted. For best results, maintain at least 4–6 inches of stubble height (residual forage) during the growing season until you intend to terminate the crop in the spring.

Winter annual legumes can cause bloat if not managed correctly. The risk of bloat can be reduced if the stand is at least 50% grass and animals are not turned onto the pasture when there is dew or they are hungry.

### **Pest management recommendations**

Although the options are limited for weed control in annual forages, many annuals are typically fast growing and will outcompete weed species. Insect damage is usually not a concern in winter annual forages. All pesticide options and treatment thresholds for insect pressure are presented in the Georgia Pest Management Handbook's section on Temporary Grazing (Special Bulletin 28–31).



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