

Oats are an excellent winter forage and good biomass production option for fall and spring grazing in pastures, but can provide good biomass in the cool season for row crops as well. Therefore, it can be considered for dual use applications.

Recommended Varieties

Variety	Reasons Why	Source
Heavy Grazer II (NF401)	Good freeze tolerance. Produces more biomass than other oat cultivars	Noble Foundation
TAMO 406	Good cold hardiness and disease resistance properties. High biomass and grain production	Texas A&M Agrilife
Bob	Good grazing potential	

Planting Information

Information	Comments	Source
Drilled Seed Depth (Inches)	1-1.5"	
Drilled Seeding Rate (lbs/acre)	70 (varies)	Higher rate may be needed in conservation tillage systems for sufficient biomass to suppress weeds in following cash crop
Broadcast Seeding Rate (lbs/acre)	100 (varies)	Broadcasting before cotton defoliation has also worked for many farmers.

Termination Information

Information	Source
<p>Oats can be terminated by herbicides like glyphosate or diquat*, tillage, high density grazing and combinations of these practices.</p> <p>Termination timing depends on goals. Oats are not as commonly used as cereal rye; however, many practices will be similar. For weed suppression, oats should be terminated at milk to soft dough stage. To reduce potential nitrogen immobilization, oats should be terminated before flowering (anthesis).</p> <p>When planting cash crop into oat residue, wait three weeks after termination so that the residue is dry and crispy. There is little information available on planting early into green oats.</p> <p>*Always follow herbicide labels for crop to be terminated and for compatibility with subsequent crop(s). Consult your local Extension and state Pest Management Handbook for herbicide recommendations.</p>	

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Cultural Traits

Traits	Comments	Source
Typical Dry Matter Range (lbs/acre)	6,000-12,000	Personal Communications
Typical Total N Range (lbs/acre)	25-50 Total N in oat aboveground biomass is due to N scavenging. The entire amount is not available during following growing season. Early termination may provide a small amount of N to following cash crop. Late termination can cause N immobilization due to high C:N ratio.	Managing Cover Crops Profitably
Life Cycle	Cool season annual grain	Managing Cover Crops Profitably
Growth Habit	Upright Good for forage in spring and fall	Managing Cover Crops Profitably
Preferred Soil pH	6.2-7.5 Oats are not tolerant of acidic soils	
Relative Costs	\$\$	Managing Cover Crops Profitably
Min. Germination Temp	72F Oats often mature later than other grains and are less cold tolerant than cereal rye	Personal communications
Cautions	High biomass can cause temporary nitrogen immobilization (loss of fertilizer N). Add 20-30% of total N recommendation to overcome. Not as cold tolerant as other cool season grains.	

Sources:

USDA Cereal Rye Plant Guide

https://plants.usda.gov/factsheet/pdf/fs_sece.pdf

Managing Cover Crops Profitably

<https://www.sare.org/Learning-Center/Books/Managing-Cover-Crops-Profitably-3rd-Edition>

Personal Communications with Blackland Farmers and Seed Suppliers.