Grass
Oats, Spring
Avena sativa

PLANT HARDINESS ZONE 7 DATASET

COVER CROP DESCRIPTION

Does not overwinter when fall-seeded. Provides moderate weed suppression and N scavenging, has high forage quality. Needs adequate fertility for maximum benefits. Good nurse crop. Not a host for take-all disease of small grains. Select spring types that go to stalk/head/seed without vernalization. Mix with radish, peas. Compared to other small grains: lowest biomass, lower C:N, lower tolerance for dry/wet extremes.


Oats, Spring - Bjorkman [2020]


Oats, Spring - Ackroyd [2020]


Oats, Spring - Ackroyd [2020]

GOALS

Growing Window	Short
Nitrogen Scavenging	
Lasting Residue	
Prevent Fall Soil Erosion	
Prevent Spring Soil Erosion	
Forage Harvest Value	
Penetrates Plow Pan	
Reduces Surface Compaction	
Improve Soil Organic Matter	
Increase Soil Aggregation	
Good Grazing	
Pollinator Food	

WEEDS

Residue Suppresses Summer Annual Weeds	
Outcompetes Summer Annual Weeds	
Suppresses Winter Annual Weeds	
Persistence	
Volunteer Establishment	

ENVIRONMENTAL TOLERANCES

Low Fertility	
Drought	
Heat	
Shade	
Flood	
Salinity	

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Growth Traits

Duration	Annual
Zone Use	Emerging
Shape And Orientation	Erect
Dry Matter (Lbs/A/Yr)	1000 - 4000
Soil Texture	Coarse Fine Medium
Soil pH	5.3 - 8.5
Soil Moisture Use	Medium
Hessian Fly Free Date?	No
Ease Of Establishment	■■■□□
Establishes Quickly	■■■■□
Early Spring Growth	■■■□□
Flowering Trigger	
Root Depth	Medium

Soil Drainage

- Very Poorly Drained
- Poorly Drained
- **Somewhat Poorly Drained**
- **Moderately Well Drained**
- **Well Drained**
- **Excessively Drained**
- Saturated Muck
- **Well Drained Muck**

Planting

Seeds Per Lb	19400
Seed Price Per Lb	$ $ $
Base Seeding Rate (Lbs/A)	60 - 100
Drilled Depth	0.75" - 1.5"
Can Aerial Seed?	Yes
Can Frost Seed?	No
Min Germination Temp (°F)	38

Termination

Tillage At Vegetative	■□□□□
Tillage At Flowering	■□□□□
Freezing At Vegetative	■■■■□
Freezing At Flowering	■■■■□
Chemical At Vegetative	■■■■■
Chemical At Flowering	■■■■■
Mow At Flowering	■■■■■
Roller-Crimp At Flowering	□□□□□

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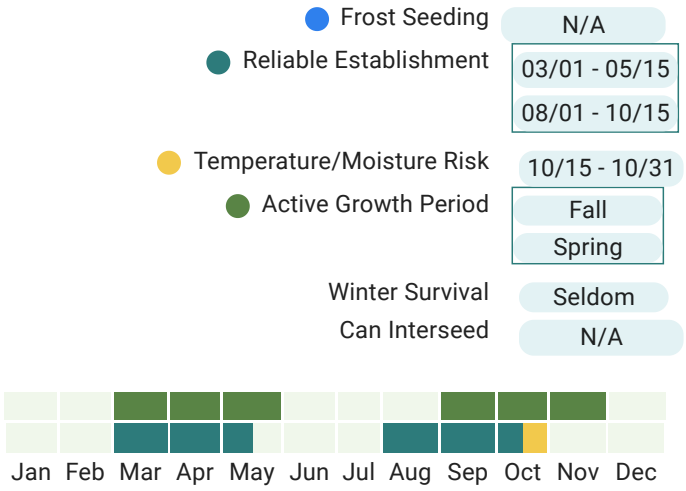
Planting and Growth Windows



Extended Comments

Nematodes: Non host for soybean cyst nematode and root knot nematode.

Basic Agronomics: Dry matter highly dependent on planting and termination date and precipitation. Prone to lodging in N-rich soil; decomposition depends on maturity at kill. When planted in September will grow faster than rye. If planted early enough (e.g. after peas), it creates a very good lasting residue. Bloat potential that is easily managed. Nitrate testing of forage is recommended.

Insects: Serve as host for various stinkbug species but will also attract their parasitoids

Forage and Grazing: Bears traffic very well when drilled.

Environmental Tolerances: Does very poorly under low-N conditions like most grasses.

References & Resources

Use of Cover Crops and Green Manures to Attract Beneficial Insects, University of Connecticut Integrated Pest Management Program
Multiple Purpose Cover Crops, Northeast Organic Farming Association of Connecticut
Fall Cover Crops, University of Delaware Cooperative Extension
Spring Planted Cover Crops for Vegetable Rotations, University of Delaware Cooperative Extension