

Legume  
**Soybeans**  
Glycine max



## PLANT HARDINESS ZONE 4 DATASET

### COVER CROP DESCRIPTION

Also known as forage soybean. Good N-fixation, biomass, and forage potential. Low reseeding and weed risk. Do not use in rotations where soybeans are grown as a cash crop to decrease disease, insect, and nematode buildup. Inoculate. Many varieties are available; use late-maturing or forage cultivars for high biomass. Its bushy growth habit mixes better with short grasses like foxtail millet. Attractive to deer so not recommended for areas with high deer pressure. Similar to cowpea for cover crop use. Compared to cowpea: more tolerant of cool weather, wet soils; less tolerant of drought, pests, poor soil fertility.



Soybeans - Ackroyd [2020]



Soybeans - Ackroyd [2020]

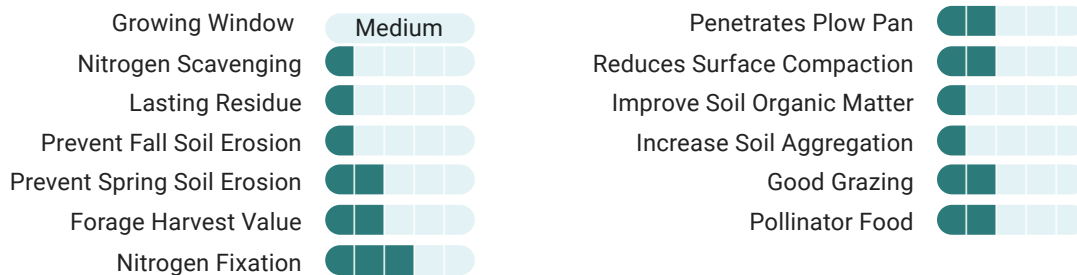


Soybeans - Mirsky Lab [2020]

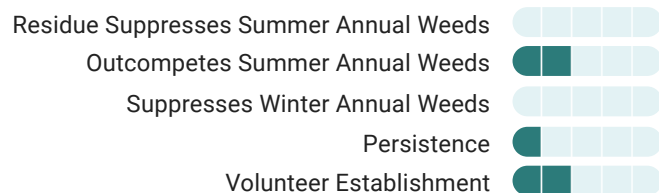


Soybeans - Mirsky Lab [2020]

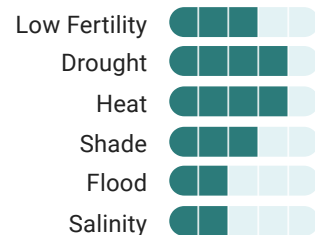
### GOALS



### WEEDS



### ENVIRONMENTAL TOLERANCES



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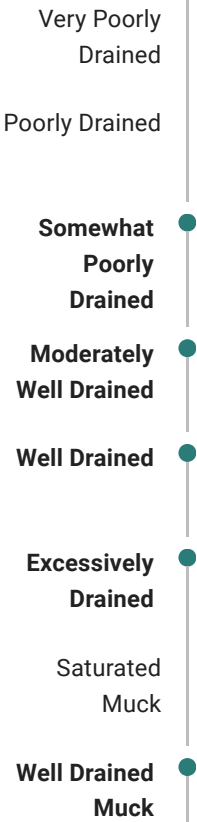


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Growth Traits

Duration	Annual
Zone Use	Emerging
Shape And Orientation	Erect
Dry Matter (Lbs/A/Yr)	500 - 2000
Soil Texture	Coarse
	Fine
	Medium
Soil pH	5.5 - 7.8
Soil Moisture Use	
Hessian Fly Free Date?	No
Nitrogen Accumulation (Lbs/A/Yr)	30 - 50
Ease Of Establishment	<div><div></div><div></div><div></div><div></div><div></div></div>
Establishes Quickly	<div><div></div><div></div><div></div><div></div><div></div></div>
Early Spring Growth	<div><div></div><div></div><div></div><div></div><div></div></div>
Flowering Trigger	Intermediate
	Earliest Day
Root Depth	Medium
Inoculant Type	Soybean

Soil Drainage



Planting

Seeds Per Lb	
Seed Price Per Lb	\$ \$ \$
Base Seeding Rate (Lbs/A)	40 - 60
Drilled Depth	1" - 1.5"
Can Aerial Seed?	No
Can Frost Seed?	No
Min Germination Temp (°F)	50

Termination

Tillage At Vegetative	<div><div></div><div></div><div></div><div></div><div></div></div>
Tillage At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Freezing At Vegetative	<div><div></div><div></div><div></div><div></div><div></div></div>
Freezing At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Chemical At Vegetative	<div><div></div><div></div><div></div><div></div><div></div></div>
Chemical At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Mow At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Roller-Crimp At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>



## PLANT HARDINESS ZONE 4 DATASET

### Planting and Growth Windows

Frost Seeding	N/A
Reliable Establishment	06/01 - 07/31
Temperature/Moisture Risk	N/A
Active Growth Period	Summer
Winter Survival	Never
Can Interseed	N/A



### Extended Comments

**Planting:** Planting rate is based partly on seed size, which can vary dramatically. Recommended seeding rate here is based on the given seed size.

**Basic Agronomics:** Dry matter highly dependent on planting and termination date and precipitation. Good seed value if a short season cultivar is used and the crop is managed properly to obtain decent quality seed. For grazing purposes, restrict to 30% of total ration or mixing with a grass is recommended.

**Weeds:** Weak plant with low volunteer seed survivability. The farther north, the less competitive against summer annual weeds.

**Forage and Grazing:** Tough to ensile; not a good emergency forage as this one comes with a learning curve.

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

**Nematodes:** Host plant for soybean cyst nematode.

**Pollinators:** Attractiveness to bees varies widely based on flower color and crop variety.

### References & Resources

**Cover Crops and Green Manures**, University of Vermont Extension

**UNH Researchers Find Forage Radish is the Cream of Cover Crops**, University of New Hampshire Ag Experiment Station