

Legume
Pea, Spring
Pisum sativum



PLANT HARDINESS ZONE 6 DATASET

COVER CROP DESCRIPTION

Also known as Yellow Pea or Canadian Spring Pea. Winter-kills if planted in fall. Excellent spring cover crop. Plant early for lush growth; fast-growing varieties are available. Inoculate the seed with appropriate *Rhizobium* spp.; cross inoculates vetch. Mixes well with upright cover crop species due to its vining growth habit. Lower biomass and total N fixation compared to overwintered peas and other fall-planted legumes.

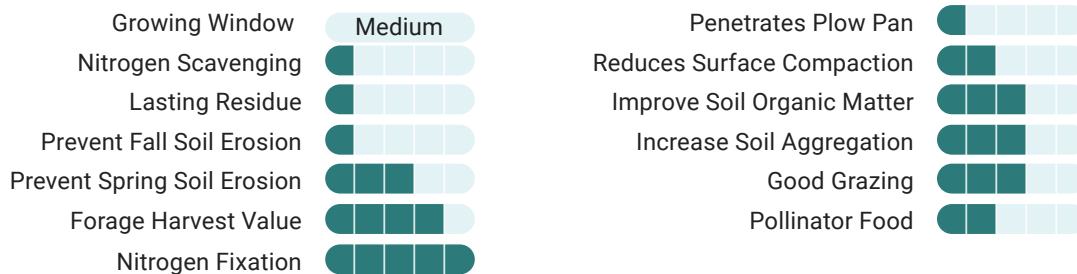


Pea, Spring - Brown [2020]

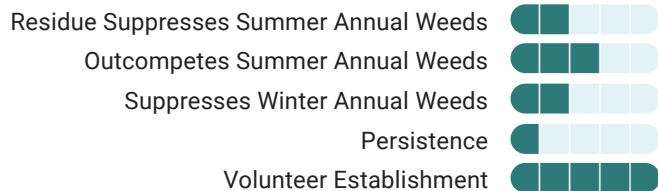


Pea, Spring - Brown [2020]

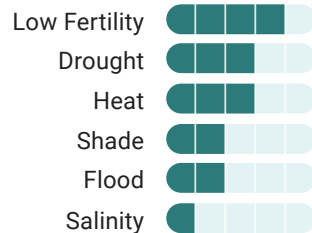
GOALS



WEEDS



ENVIRONMENTAL TOLERANCES



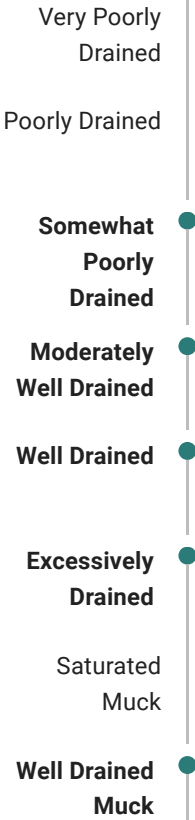


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Growth Traits

Duration	Annual
Zone Use	Common
Shape And Orientation	Semi-Erect
	Climbing
Dry Matter (Lbs/A/Yr)	1000 - 2500
Soil Texture	Medium
Soil pH	6 - 7.5
Soil Moisture Use	Medium
Hessian Fly Free Date?	No
Nitrogen Accumulation (Lbs/A/Yr)	40 - 100
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	Plant Size
Root Depth	Medium
Inoculant Type	Pea/Vetch

Soil Drainage



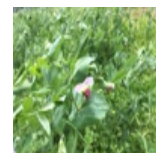
Planting

Seeds Per Lb	3500
Seed Price Per Lb	\$ \$ \$
Base Seeding Rate (Lbs/A)	50 - 100
Drilled Depth	1" - 1.5"
Can Aerial Seed?	No
Can Frost Seed?	No
Min Germination Temp (°F)	42

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>

Pisum sativum



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Frost Seeding	N/A
Reliable Establishment	03/01 - 09/30
Temperature/Moisture Risk	N/A
Active Growth Period	Fall Spring Summer
Winter Survival	Never
Can Interseed	N/A





Extended Comments

Taxonomy: forage pea would be better common name - actual garden peas have been bred for unpigmented seed coats and high sugar, which reduces germination

Basic Agronomics: Dry matter highly dependent on planting and termination date and precipitation. Season length, habit vary by cultivar. Biomass breaks down quickly; early planting and termination reduces winter survival. Mixes well with grains when grown for forage. Bloat potential that is easily managed. Seed vigor highly variable. For grazing purposes, restrict to 30% of total ration or mixing with a grass is recommended.

Termination: If using herbicides to terminate use a tank mixture (e.g., glyphosate + dicamba or 2,4-d)

Forage and Grazing: Good cool season component for grazing mixes.

Weeds: Late planting increases heaving. Weak plant with low volunteer seed survivability.

Disease: Information too limited to rate P and K effect. Some cultivars, nematode resistant. Poor host for soybean cyst nematode. With late planting, biomass is low and spring pea won't suppress winter weeds. Good cool season component for grazing mixes. Quick cool season nitrogen fixer. Susceptible to sclerotinia in East; Late planting increases heaving. Host for root knot nematode, Penetrans Root-Lesion Nematode and sugarbeet cyst nematode. Weak plant with low volunteer seed survivability.

Goals: Best mixed with cereals to prevent lodging. Less competitive against summer annual weeds in hot-summer areas (such as Continental hardiness zone 6).

Pollinators: Self-pollinated so not particularly useful for pollinators compared to other legumes

Nematodes: Some cultivars, nematode resistant. Poor host for soybean cyst nematode. Host for root knot nematode, Penetrans Root-Lesion Nematode and sugarbeet cyst nematode.

References & Resources

Fall Cover Crops, University of Delaware Cooperative Extension

Spring Planted Cover Crops for Vegetable Rotations, University of Delaware Cooperative Extension

Using Flowering Cover Crops for Native Pollinating Bee Conservation, Penn State Extension