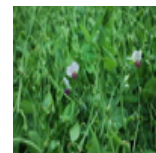


Legume  
**Pea, Winter**  
*Pisum sativum*



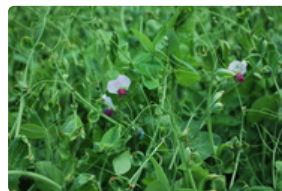
## PLANT HARDINESS ZONE 7 DATASET

### COVER CROP DESCRIPTION

Also known as Austrian Winter Pea. Vining cool-season annual. Variable winter hardiness. Excellent N-fixer, good biomass and forage. Low risk of reseeding and becoming a weed. Susceptible to sclerotinia crown rot, rotate with non-susceptible crops to reduce risk. Inoculate the seed with appropriate *Rhizobium* spp; cross inoculates with vetch. If the goal is overwintering, select cultivar accordingly; avoid planting too early or late, and plant at the deeper end of the recommended planting depth range (~2" deep). May be planted in spring, but potentially slower growth and lower biomass and N fixation than spring peas. Mixes well with upright species due to its vining habit. Residue decomposes rapidly and releases N faster than vetch.

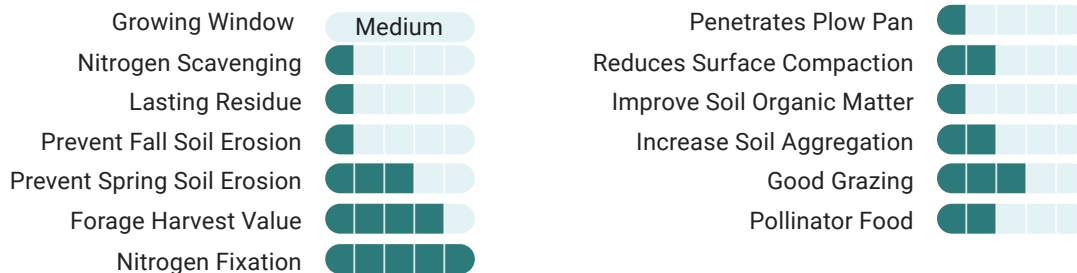


Pea, Winter - Mirsky Lab [2020]

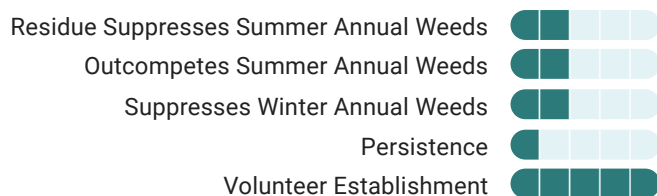


Pea, Winter - Mirsky Lab [2020]

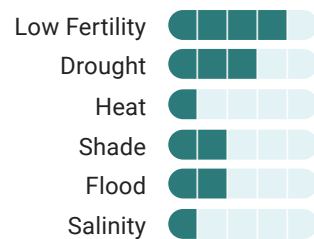
### GOALS



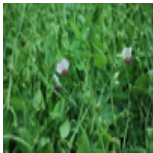
### WEEDS



### ENVIRONMENTAL TOLERANCES



Legume  
Pea, Winter  
Pisum sativum

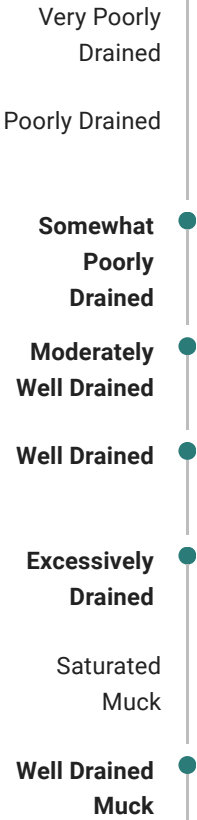


PLANT HARDINESS ZONE 7 DATASET

Growth Traits

Duration	Annual
Zone Use	Common
Shape And Orientation	Semi-Erect
	Climbing
Dry Matter (Lbs/A/Yr)	1000 - 2500
Soil Texture	Medium
	Coarse
Soil pH	6 - 7.5
Soil Moisture Use	Medium
Hessian Fly Free Date?	No
Nitrogen Accumulation (Lbs/A/Yr)	40 - 125
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



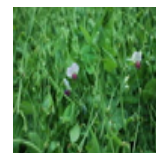
Planting

Seeds Per Lb	4000
Seed Price Per Lb	\$ \$ \$
Base Seeding Rate (Lbs/A)	40 - 90
Drilled Depth	1" - 1.5"
Can Aerial Seed?	No
Can Frost Seed?	No
Min Germination Temp (°F)	42

Termination

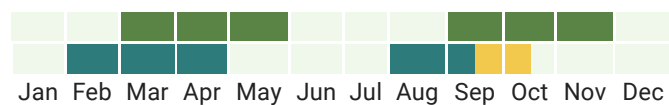
Tillage At Vegetative	<div><div></div><div></div><div></div><div></div><div></div></div>
Tillage At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Freezing At Vegetative	<div><div></div><div></div><div></div><div></div><div></div></div>
Freezing At Flowering	<div><div></div><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>

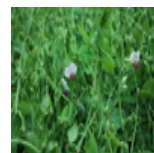
Pisum sativum



PLANT HARDINESS ZONE 7 DATASET

● Frost Seeding	N/A
● Reliable Establishment	02/15 - 04/30 08/15 - 09/25
Temperature/Moisture Risk	09/25 - 10/15
● Active Growth Period	Fall Spring
Winter Survival	Expected Seldom
Can Interseed	N/A





## PLANT HARDINESS ZONE 7 DATASET

### Extended Comments

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

**Goals:** Best mixed with cereals to prevent lodging.

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

**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.

**Insects:** Interplanted with zucchini can reduce striped and spotted cucumber numbers and result in greater spider numbers. However, if not kept at the right height can be too competitive with the crop

**Disease:** Susceptible to sclerotinia in the East.

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

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

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

**Environmental Tolerances:** Zone 7 is the coldest zone in which winter pea might reliably survive; survival is less certain in Zone 7a than Zone 7b.

### References & Resources

**Fall Cover Crops**, University of Delaware Cooperative Extension

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

**Cover Crops for Conservation Tillage Systems**, Penn State Extension

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