

# PLANT HARDINESS ZONE 6 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.

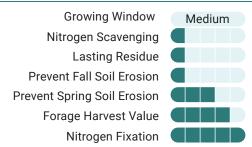




Pea, Winter - Mirsky Lab [2020]

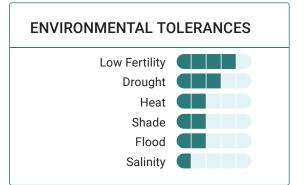
Pea, Winter - Mirsky Lab [2020]

# **GOALS**

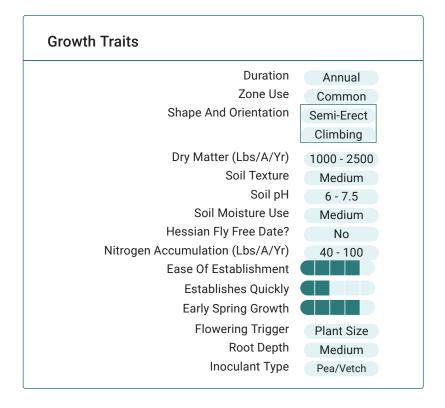


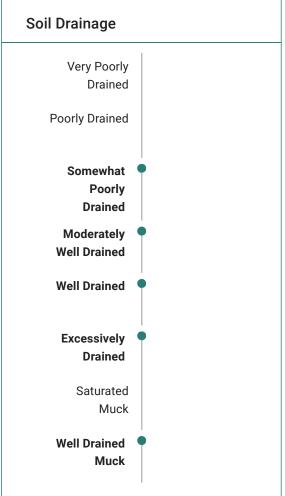
Penetrates Plow Pan **Reduces Surface Compaction** Improve Soil Organic Matter Increase Soil Aggregation **Good Grazing** Pollinator Food

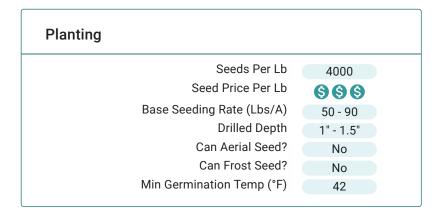
# **WEEDS** Residue Suppresses Summer Annual Weeds **Outcompetes Summer Annual Weeds** Suppresses Winter Annual Weeds Persistence Volunteer Establishment

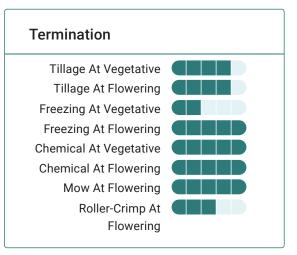


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### **Extended Comments**

Taxonomy: Most other winter pea varieties are not as winter hardy as the Austrian Winter Pea.

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.

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

**Cover Cropping for Success**, University of Maine Cooperative Extension

Cover Crops for Conservation Tillage Systems, Penn State Extension

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