

Legume
Cowpea
Vigna unguiculata



PLANT HARDINESS ZONE 7 DATASET

COVER CROP DESCRIPTION

Excellent summer annual legume. Needs heat to grow well. Very heat and drought tolerant once established, deep taproot, tolerates low fertility. Some shade tolerance. Grows fast, good biomass and forage producer, high N fixation potential, good weed suppressor. Extrafloral nectaries key for beneficial insects. Some suppression for problem nematodes. Low reseeding and weed risk. Inoculate with appropriate *Rhizobium* spp.; cross-inoculates with peanut, sunn hemp. Many varieties available: use forage or cover crop cultivars, with bush types for short mixes, vine- or runner- types for tall mixes. Less predation by deer and woodchucks compared to soybeans.



Cowpea - NancyLeeAdamson [2020]



Cowpea - Ackroyd [2020]



Cowpea - Salon [2020]

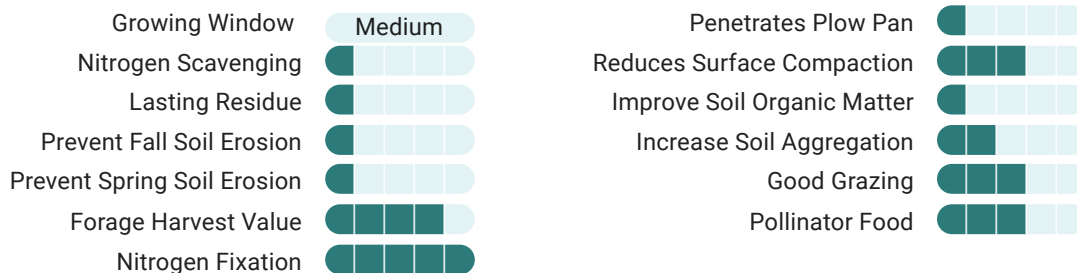


Cowpea - Ackroyd [2020]

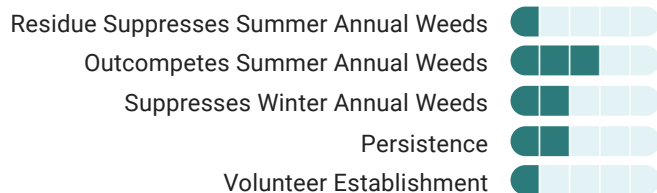


Cowpea - Ackroyd [2020]

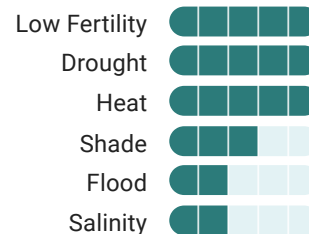
GOALS



WEEDS



ENVIRONMENTAL TOLERANCES



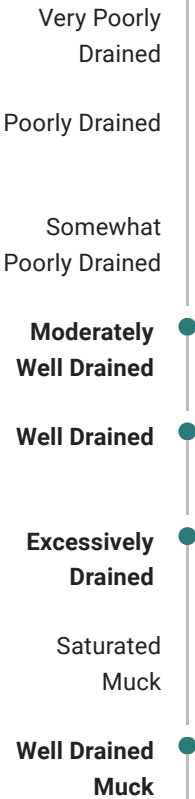


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Growth Traits

Duration	Annual
Zone Use	Emerging
Shape And Orientation	Semi-Erect
	Climbing
Dry Matter (Lbs/A/Yr)	2500 - 4500
Soil Texture	Fine
	Medium
	Coarse
Soil pH	6 - 8
Soil Moisture Use	Medium
Hessian Fly Free Date?	No
Nitrogen Accumulation (Lbs/A/Yr)	70 - 150
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	Deep
Inoculant Type	Cowpea
	Lespedeza

Soil Drainage



Planting

Seeds Per Lb	3600
Seed Price Per Lb	\$ \$ \$
Base Seeding Rate (Lbs/A)	50 - 90
Drilled Depth	1" - 1.5"
Can Aerial Seed?	No
Can Frost Seed?	No
Min Germination Temp (°F)	58

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>



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Planting and Growth Windows

Frost Seeding

Reliable Establishment

Temperature/Moisture Risk

Active Growth Period

Winter Survival

Can Interseed

N/A

06/01 - 07/15

07/15 - 07/31

Summer

Never

N/A

JanFebMarAprMayJunJulAugSepOctNovDec

Extended Comments

Pollinators: Has an extra-floral nectary that is attractive to pollinators and beneficial insects. Cowpea does not need to be in active flowering for pollinators to access this extra-floral nectary.

Goals: Highly competitive against weeds given sufficient heat.

Growth, Roots, and Nutrients: Rooting depth is highly dependent on planting timing; cowpea needs time in the field to put down deep roots.

Nematodes: Host for sting and stubby root nematodes; moderately resistant to root-knot nematode.

Weeds: Less competitive against summer annual weeds in northern hardiness zones.

Forage and Grazing: Good for forage harvest and grazing in areas with enough heat to allow it to put on biomass. Used in mixes as a summer rotational grazing crop.

References & Resources

Cover Crops and Green Manures (New England Vegetable Management Guide), University of Massachusetts Extension

Choosing Cover Crops, University of Massachusetts Extension