

Grass  
**Millet, Japanese**  
*Echinochloa esculenta*



## PLANT HARDINESS ZONE 6 DATASET

### COVER CROP DESCRIPTION

Summer annual grass. Can grow in flooded soils and standing water. Adapted to soil with pH as low as 4.5. Prone to premature flowering if seeded late summer. Very responsive to nitrogen. Good smother crop at high seeding rate but may become weed if allowed to go to seed. Mix with cowpeas, soybeans to create a diverse summer mixture. Shorter, finer-stemmed, lower-biomass option compared to sorghum-sudangrass or pearl millet. Does not mow-kill as well and may mature faster/reseed more easily than foxtail millet.



Millet, Japanese - Brown [2020]

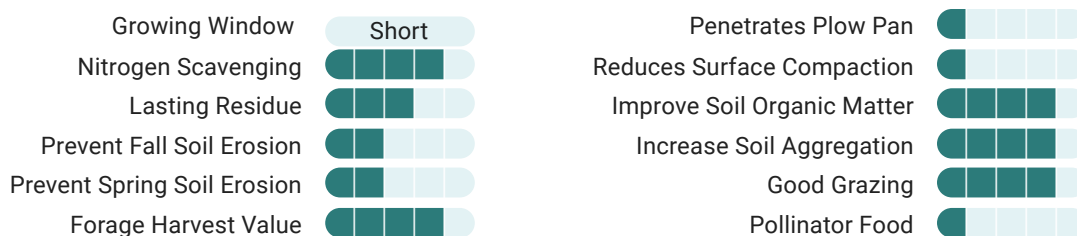


Millet, Japanese - Brown [2020]

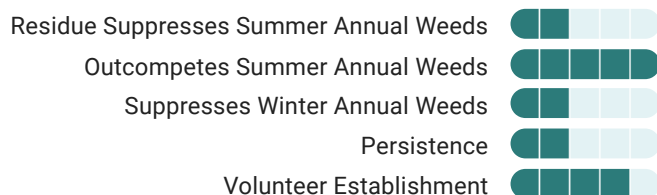


Millet, Japanese - Brown [2020]

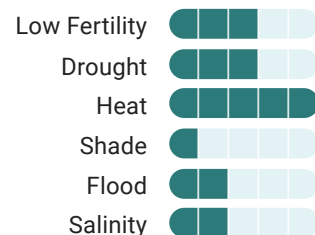
### GOALS



### WEEDS



### ENVIRONMENTAL TOLERANCES



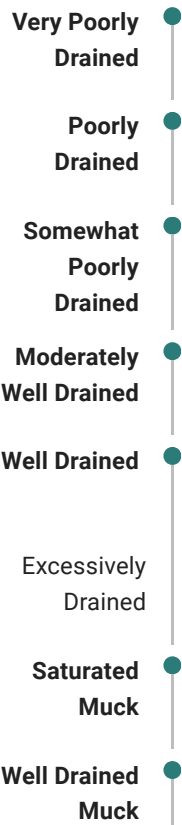


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Growth Traits

Duration	Annual
Zone Use	Common
Shape And Orientation	Erect
Dry Matter (Lbs/A/Yr)	1500 - 3500
Soil Texture	Coarse
	Medium
	Fine
Soil pH	5.5 - 6.5
Soil Moisture Use	Medium
Hessian Fly Free Date?	No
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	(zeIntermediate)
Root Depth	Medium

Soil Drainage



Planting

Seeds Per Lb	155000
Seed Price Per Lb	\$ \$ \$
Base Seeding Rate (Lbs/A)	15 - 30
Drilled Depth	0.5" - 0.75"
Can Aerial Seed?	No
Can Frost Seed?	No
Min Germination Temp (°F)	65

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	N/A
Reliable Establishment	05/01 - 07/15
Temperature/Moisture Risk	04/15 - 04/30
Active Growth Period	Summer
Winter Survival	Never
Can Interseed	N/A



Extended Comments

**Taxonomy:** vs Echinochloa frumentacea

**Basic Agronomics:** we have gotten up to 4 tons/acre dry matter in RI by seeding at 30-40 lbs/acre. Really responds to nitrogen!

**Planting:** Daylength sensitive. Plant before mid-July to maximize biomass

**Growth, Roots, and Nutrients:** Plant in June to July in warm soils. ¼ to ½ inch deep. Japanese millet can grow in flooded soils and standing water as long as a portion of the plant remains above the top of the water. Consider Japanese Millet or Brown Top Millet as a summer annual in the North with somewhat cooler temps and acid soils. Grows rapidly, good summer annual smother crop. Fibrous roots that can grow 2 ft deep.

References & Resources

[Cover Crop Research at the University of Rhode Island](#), University of Rhode Island Cooperative Extension  
[Cover Crops and Green Manures \(New England Vegetable Management Guide\)](#), University of Massachusetts Extension  
[Cover Cropping for Success](#), University of Maine Cooperative Extension  
[Cover Crops for Home Gardens](#), University of Maine Cooperative Extension  
[Using Green Manures](#), Maine Organic Farmers and Gardeners Association