Plant Propagation Protocol for *Cuscuta gronovii*

ESRM 412 – Native Plant Production

Amy Burdick

TAXONOMY	
Plant Family	Custcutaceae
Scientific Name	*Cuscuta gronovii*
Common Name	Scaldweed
Species Scientific Name	*Cuscuta gronovii* Willd. Ex Schult
Scientific Name	*Cuscuta gronovii* Willd. Ex Schult
Varieties	*Cuscuta gronovii* Willd. ex Schult. var. *calyptrata* Engelm. *Cuscuta gronovii* Willd. ex Schult. var. *Gronovii* *Cuscuta gronovii* Willd. ex Schult. *var. latiflora* Engelm. *Cuscuta gronovii* Willd. ex Schult. *var. saururi* (Engelm.) MacMill. *Cuscuta gronovii* Willd. ex Schult. *var. curta* Engelm. (USDA)
Sub-species	*Calyptrata* Engelm *Latiflora* Engelm *Saururi* Engelm
Cultivar	*Cuscuta gronovii*
Common Synonym(s)	*Cuscuta gronovii var latiflora* Engelm *Cuscuta vulgivaga* Engelm *Gramica gronovii* (USDA)
Common Name(s)	Common Dodder, Bigfruit Dodder, Swamp Dodder, Love Dodder (Sandler)
Species Code (as per USDA Plants database)	CUGR
GENERAL INFORMATION	
Geographical range	Most of the US and Canada, native to eastern and western oregon. (USDA)
Ecological distribution	Anthropogenic, river or lake shores, wetland margins, meadows and fields (USDA)
Climate and elevation range	Temperate climates, low to mid elevations (USDA)

Local habitat and abundance	Not native to Washington but abundant in all counties in Oregon. (USDA)
Plant strategy type / successional stage	weedy/colonizer (Oregon DOA 2015)
Plant characteristics	Flowering shrub, flowers from July to October, takes over spaces, long viny plant, seeds can stay viable for up to 20 years, parasitic plant,
PROPAGATION DETAILS	
Ecotype	Ex: seed came from wild collection
Propagation Goal	seeds
Propagation Method	seed
Product Type	bareroot
Stock Type	CUGR
Time to Grow	Don't need to be outplants if field grown.
Target Specifications	Seeds are produced in great quantity, they can be field sown in 2cm of soil, seems unnecessary
Propagule Collection Instructions	Seeds germinate best in 22 to 23 degrees celsius, should be planted in late spring when temperature reach this, and should be field sown. ("Cuscuta gronovii (common dodder): Go Botany")
Propagule Processing/Propagule Characteristics	Seed weighs 2.3g and is reported to have up to 22,900 seeds in one clump ("Cuscuta gronovii (common dodder): Go Botany")
Pre-Planting Propagule Treatments	Scarification has been shown to help seeds germinate, manual or fire scarification,
Growing Area Preparation / Annual Practices for Perennial Crops	Field grown, scaldweed will takeover, likes ecosystems near water, i.e. banks of rivers, bogs, etc (USDA)

Establishment Phase Details	Scarification, Germination in heat (Oregon DOA 2015)
Length of Establishment Phase	About 20 days (Hooker 1889, 34)
Active Growth Phase	Rapid growth after germination, growing up to ¾ of an inch in 24 hours, long coils erupt from seed and grow fast, suckers in full 6 days after germination. (Hooker 1889, 34)
Length of Active Growth Phase	About 6 days (Hooker 1889, 34)
Hardening Phase	Plants grow suckers and their roots die. The suckers then find a host plant to gain nutrients from and continue growing and spreading, they flower from July to October and then drop seeds in preparation for the winter ("UWL Website")
Length of Hardening Phase	About 4 months (Hooker 1889, 34)
Harvesting, Storage and Shipping	warm and moist place for seedlings 22-23 degrees celsius ("Cuscuta gronovii" 2022)
Length of Storage	Seeds can stay viable for up to 20 years (Perschmann)
Guidelines for Outplanting / Performance on Typical Sites	They are parasitic plants that are not recommended to be propagated. They often take over sites and kill their host plants. (Cuscuta Species, Florida DOA&CS)
Other Comments	Cuscuta gronovii is considered a parasite or noxious weed in most places as it works as a predator to take out many plants. It is not recommended to propagate it despite in native status to many states in the US and provinces in Canada. (Burnham 2013)
INFORMATION SOURCES	
References	Burnham, Robyn J. 2013. "Cuscuta gronovii | CLIMBERS." CLIMBERS. https://climbers.lsa.umich.edu/?p=227. "Cuscuta gronovii." 2022. Coastal Plain Plants. http://coastalplainplants.org/wiki/index.php/Cuscuta_gronovii

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