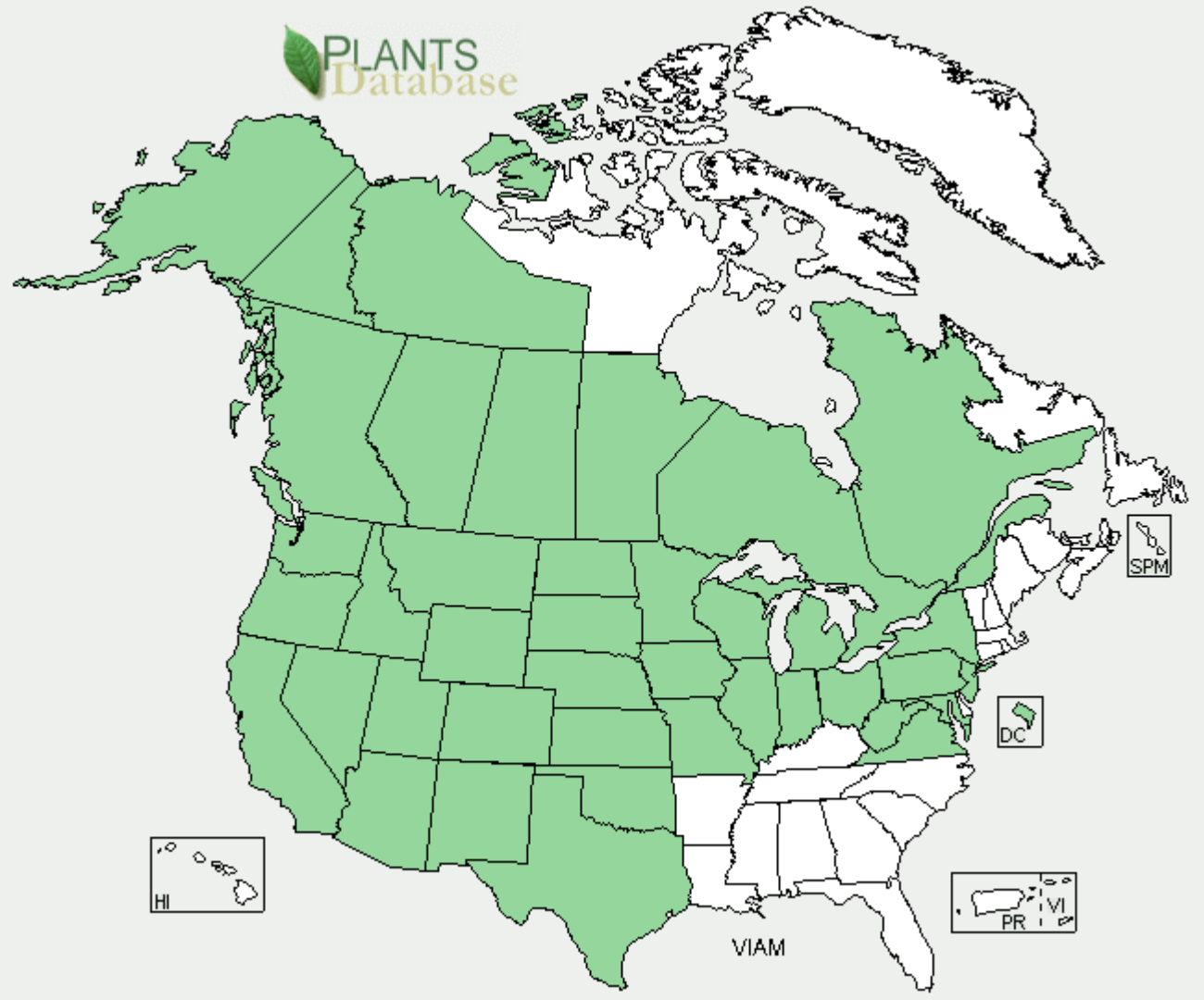
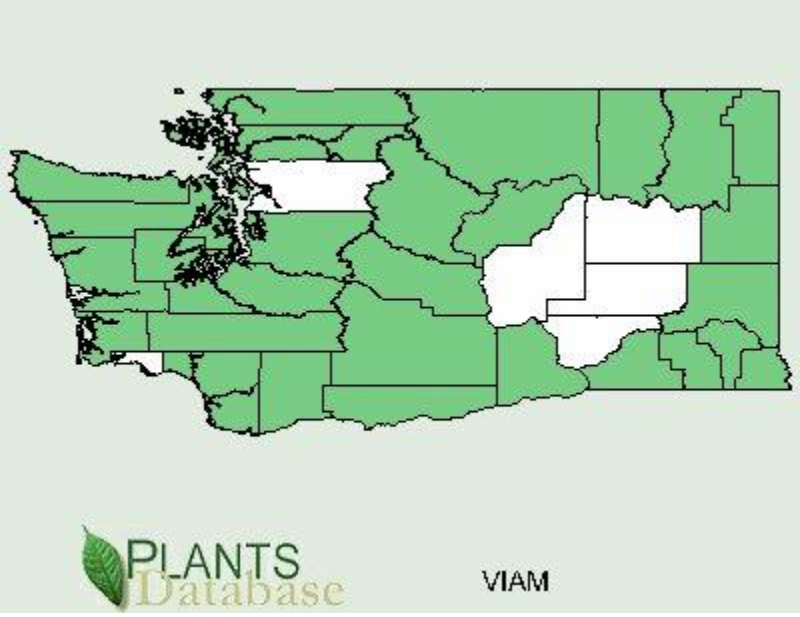
Plant Propagation Protocol for *Vicia Americana*

ESRM 412 – Native Plant Production





Images Courtesy of http://plants.usda.gov/java/profile?symbol=VIAM

TAXONOMY	
Family Names	
Family Scientific Name:	Fabaceae [9,11]
Family Common Name:	
Scientific Names	
Genus:	*Vicia*
Species:	*Americana*
Species Authority:	Muhl. [12]
Variety:	
Sub-species:	
Cultivar:	
Authority for Variety/Sub-species:	
Common Synonym(s):	*Vicia California ssp. Oregon, Vicia durbrowi* [3]
Common Name(s):	American Vetch, Wild Vetch, Stiffleaf Vetch, Wild Pea[9]
Species Code:	VIAM
GENERAL INFORMATION	
Geographical range:	*See map above.* American vetch is found from Alaska to Quebec, South to Southern Virginia and West across the Great Plains to California, Oregon, and Washington.[2]
Ecological distribution:	Typically found in moist to dry areas; meadows, thickets, swampy woods, grassy valleys, and foothills.[2]
Climate and elevation range	0 – 8000 ft [3]
Local habitat and abundance; may include commonly associated species	Some common associates include: *Achillea mellefoium, Aster foliaceus, Aster conspicuous, Fragaria virginiana, Geranium richardsonii, Geranium viscosissimum, Viola candensis,*

	Artemisia campestris[4,5,6,7]
Plant strategy type:	Species occurs in all stages of succession.[4,8]
Plant characteristics:	Species is a Forb Geophyte.[4] Trailing or climbing stems may reach up to 30" in length. The leaves are primarily compound and divided into eight to eighteen oval to linear leaflets.[2] This rhizomatous species is browsed by livestock, and seed and foliage eaten by birds.[2,4]
PROPAGATION DETAILS	
Ecotype:	
Propagation Goal:	Plants
Propagation Method:	Seed
Product Type	
Stock Type:	
Time to Grow:	Species begins growth in early spring and summer. It will flower from May to August, with the seeds maturing one month later. [2,4]
Target Specifications:	
Propagule Collection:	Collect seeds in early August and September.[9] Using sharp hand clippers, harvest the seed pods as they turn brown.[9] Vacuums and seed strippers are not recommended.[9]
Propagule Processing:	Seed density is 24,550 – 41,400 seeds per pound.[2] Seeds are .13" in length. [9] Seed longevity is unknown, but considered to be many years.[9]
Pre-Planting Propagule Treatments:	Clean the seed mechanically by flailing and clipping. Store the seed at 68° F. There is no stratification requirements.[2] Stratification or scarification may accelerate germination, but will not improve germination capacity.[9] Seeds should be one year old before sown.[2,9]
Growing Area Preparation / Annual Practices for Perennial Crops:	Seed require moist clayey soil with at least 8 hours of direct light per day.[2,9] Directly sow into rows with 24" spacing, at a depth of half an inch. [9,10]
Establishment Phase:	Plant in the spring or fall in a bed clear of weeds and other rhizomatous grasses as there are no selective herbicides that can be used.[9]
Length of Establishment Phase:	Early germination occurs after 14 days. [9,10]
Active Growth Phase:	
Length of Active Growth Phase:	
Hardening Phase:	
Length of Hardening Phase:	
Harvesting, Storage and Shipping:	
Length of Storage:	
Guidelines for Outplanting:	

Other Comments:	
INFORMATION SOURCES	
References (full citations):	[2] Rose, R., Chacuhlski, C. and Haase, D. 1998 Propogation of Pacific Northwest Native Plants. Oregon State University Press. Corvallis, OR. 1998. [3] California Native Plant Link Exchange. http://www.cnplx.info/nplx/species?taxon=Vicia+americana. Accessed 5/16/2011. [4] USDA Forest Service: Fire Effects Information System. http://www.fs.fed.us/database/feis/plants/forb/vicame/all.html. Accessed 5/16/2011. [5] Mueggler, W. F. 1985. Forage. In: DeByle, Norbert V.; Winokur, Robert P., eds. Aspen: ecology and management in the western United States. Gen. Tech. Rep. RM-119. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station: 129-134. [6] Oswald, Brian P.; Covington, W. Wallace. 1984. Effect of a prescribed fire on herbage production in southwestern ponderosa pine on sedimentary soils. Forest Science. [7] Redmann, Robert E.; Schwarz, Arthur G. 1986. Dry grassland plant communities in Wood Buffalo National Park, Alberta. Canadian Field-Naturalist. 100(4): 526-532. [8] Halpern, C. B. 1989. Early successional patterns of forest species: interactions of life history traits and disturbance. Ecology. 70(3):704-720. [9] Burton, C.M., Burton, P.J. A Manual for Growing and Using Seed from herbaceous Plants Native to the Northern Interior of British Columbia. Published by Symbios Research & Restoration, Smithers, BC. Acessed online via http://www.env.gov.bc.ca/wld/natplant_manual_intropg.htm. [10] Pahl, M., and A. Smreciu. 1999. Growing Native Plants of Western Canada: Common Grasses and Wildflowers. Alberta Agriculture, Food and Rural Development, and Alberta Research Council. Edmonton, Alberta. 118 p. [11] United States Department of Agriculture: Natural Resources Conservation Service. http://plants.usda.gov/java/profile?symbol=VIAM. Accessed 5/17/2011.

	[12]Illinois Plant Information network. http://nrs.fs.fed.us/data/il/ilpin/local-resources/includes/3127.txt. Accessed 5/17/2011.
Other Sources Consulted (but that contained no pertinent information) (full citations):	[1] Jones, George. The Flowering Plants and Ferns of Mount Rainer. University of Washington Press. 1938.
Protocol Author (First and last name):	Matthew, Ross
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