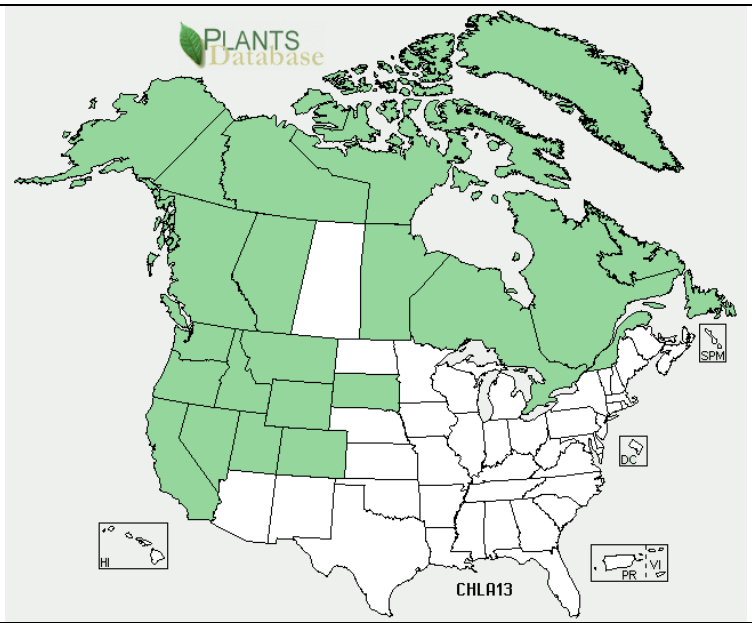
Plant Propagation Protocol for *Chamerion latifolium* (*Epilobium latifolium*) (dwarf fireweed)
ESRM 412 – Native Plant Production
Spring 2008

TAXONOMY	
Family Names	
Family Scientific Name:	*Onagraceae*
Family Common Name:	Evening Primrose Family
Scientific Names	
Genus:	*Chamerion*
Species:	*latifolium*
Species Authority:	(L.) Holub
Variety:	
Sub-species:	
Cultivar:	
Authority for Variety/Sub-species:	
Common Synonym(s):	*Epilobium latifolium*, *Chamaenerion latifolium*, *Chamerion subdentatum*
Common Name(s):	Dwarf fireweed, alpine fireweed, broadleaf willowherb, river-beauty [1]
Species Code (as per USDA Plants database):	CHLA13
GENERAL INFORMATION	
Geographical range:	
Ecological distribution:	Damp areas such as damp slopes, margins of streams, and river gravels [2]

Climate and elevation range	Wooded areas, semi-shade, cultivated beds [2]; Can grow at sea-level and even found at regions around 5000m [3]
Local habitat and abundance:	Common and abundant [3]
Plant strategy type:	Weedy/Colonizer; Thrives best when the competition has been greatly reduced. [3]
Plant characteristics:	Die at the end of each growing season [3], plants perennial herbs [3]
PROPAGATION DETAILS	
Ecotype:	Sandy areas, especially on roadsides and river bars [4]
Propagation Goal:	Plants
Propagation Method:	Seed
Product Type:	Container (Plug)
Stock Type:	Not available.
Time to Grow:	Not available.
Target Specifications:	Root trainer, 10.5 cubic inches per cell. A firm root plug and multiple leaves. [4]
Propagule Collection:	When the capsule begins to show signs of opening, collection of seeds will begin. Most of the seeds seem to be captured by hand and put into a bucket. The seeds turn golden when ripe at approximately the end of July. [4]
Propagule Processing:	Air dry works best while cleaning consists of three steps; Using a brush cleaner, a hand screen, and an air separator. The seeds are then stored in a freezer. [4]
Pre-Planting Propagule Treatments:	In the fall, two seeds per cell are planted using facultative soil mix. A cold/moist stratification works best with ambient temperature changes. [4]
Growing Area Preparation:	In spring, the cells should be brought into a greenhouse. Then let the seeds germinate for about 10 days. [4]
Establishment Phase:	After the last frost, plants should be moved to a lathhouse. They then should be fertilized rarely after true leaves appear. [4]
Length of Establishment Phase:	Two months.
Active Growth Phase:	Not available.
Length of Active Growth Phase:	Not available.
Hardening Phase:	Not available.
Length of Hardening Phase:	Not available.
Harvesting, Storage and Shipping (of	Not available.

seedlings):	
Length of Storage (of seedlings, between nursery and outplanting):	Not available.
Guidelines for Outplanting:	Not available.
Other Comments:	Not available.
INFORMATION SOURCES	
References (full citations):	1. USDA, ARS, National Genetic Resources Program. *Germplasm Resources Information Network - (GRIN)* [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?410681 (13 May 2008) 2. Morris, R. (2000). *Plants for A Future - Species Database*. Retrieved May 13, 2008, from Epilobium latifolium: http://www.ibiblio.org/pfaf/cgi-bin/arr_html?Epilobium+latifolium 3. S.G. Aiken, M.J. Dallwitz, L.L. Consaul, C.L. McJannet, L.J. Gillespie, R.L. Boles, G.W. Argus, J.M. Gillett, P.J. Scott, R. Elven, M.C. LeBlanc, A.K. Brysting and H. Solstad. 1999 onwards. Flora of the Canadian Arctic Archipelago: Descriptions, Illustrations, Identification, and Information Retrieval. Version: 29th April 2003. http://www.mun.ca/biology/delta/arcticf/ 4. Hunt, Peggy; Moore, Nancy. 2003. Propagation protocol for production of container *Chamerion latifolium* (L.) Holub plants; Alaska Department of Natural Resources Plant Materials Center, Palmer, Alaska. In: Native Plant Network. URL: http://www.nativeplantnetwork.org (accessed 13 May 2008). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery. 5. Burke Museum of Natural History and Culture. (2006). *WA Native Plant Society.* Retrieved May 13, 2008, from Chamerion latifolium: http://biology.burke.washington.edu/herbarium/imagecollection.php?Genus=Chamerion&Species=latifolium 6. Wildflower Center. (2007, January 1). *University of Texas at Austin*. Retrieved May 13, 2008, from Native Plant Databse: http://www.wildflower.org/plants/result.php?id_plant=CHLA13
Other Sources Consulted (but that contained no pertinent information) (full citations):	7. Baskin, Carol C.; Baskin, Jerry M. 2002. Propagation protocol for production of container *Chamerion latifolium* (L.) Holub. plants; University of Kentucky, Lexington, Kentucky. In: Native Plant Network. URL: http://www.nativeplantnetwork.org (accessed 13 May 2008). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery. 8. Montana.Gov. *Montana Field Guides*. Retrieved May 13, 2008,

	from Dwarf Fireweed: http://fieldguide.mt.gov/detail_PDONA060E0.aspx 9. Canadian Forest Service. (2007, August 22). *Canada's Plant Hardiness Site*. Retrieved May 13, 2008, from Natural Resources Canada: http://planthardiness.gc.ca/ph_spp_intro.pl?lang=en&speciesid=1004903 10. Calflora: Information on California plants for education, research and conservation. [web application]. 2008. Berkeley, California: The Calflora Database [a non-profit organization]. Available: http://www.calflora.org/. (Accessed: May 13, 2008)
Protocol Author (First and last name):	Charlotte Campbell
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http://www.nativeplantnetwork.org/network/SampleBlankForm.asp
(Burke Museum of Natural History and Culture, 2006)