Plant Propagation Protocol – Caltha palustris L. var. palustris

ESRM 412 – Native Plant Production

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Spring 2007

|   | TAXONOMY  |  |
|---|---|--|
| Family Names                                |   |  |
| Family Scientific Name:                     | Ranunulaceae  |  |
| Family Common Name:                         | Buttercup   |  |
| Scientific Names                            | , <u>*</u>  |  |
| Genus:                                      | Caltha  |  |
| Species:                                    | palustris   |  |
| Species Authority:                          | L.  |  |
| Variety:                                    | palustris   |  |
| Sub-species:                                |   |  |
| Cultivar:                                   |   |  |
| Authority for Variety/Sub-species:          |   |  |
| Common Synonym(s)                           |   |  |
| Genus:                                      | Caltha  |  |
| Species:                                    | palustris   |  |
| Species Authority:                          | L.  |  |
| Variety:                                    | asarifolia  |  |
| Sub-species:                                |   |  |
| Cultivar:                                   |   |  |
| Authority for Variety/Sub-species:          |   |  |
| Common Name(s):                             | Yellow marsh marigold                                 |  |
| Species Code (as per USDA Plants database): | CAPAP6  |  |
| GENERAL INFORMATION                         |   |  |
| General Distribution (geographical          | Montane meadows, Alpine transition zones,             |  |
| range (states it occurs in),                | standing/running water of snowmelt, coastal bogs from |  |
| ecosystems, etc):                           | Alaska to Oregon, etc. (Kruckeberg 1996)              |  |
|   |   |  |
| Climate and elevation range                 | Mediterranean climate from sea level to alpine zone.  |  |
| Local habitat and abundance; may            | Central coast of WA (plants.usda.gov)                 |  |
| include commonly associated                 |   |  |
| species                                     |   |  |
| Plant strategy type / successional          |   |  |
| stage (stress-tolerator, competitor,        | Perennial (plants.usda.gov)                           |  |
| weedy/colonizer, seral, late                |   |  |
| successional)                               |   |  |
| PROPAGATION DETAILS                         |   |  |

| Ecotype (this is meant primarily for   |   |
|--|---|
| experimentally derived protocols,      |   |
| and is a description of where the      |   |
| seed that was tested came from):       |   |
| Propagation Goal (Options: Plants,     | Plants  |
| Cuttings, Seeds, Bulbs, Somatic        |   |
| Embryos, and/or Other Propagules):     |   |
| Propagation Method (Options: Seed      | Seed  |
| or Vegetative):                        |   |
| Product Type (options: Container       | Container (plug)  |
| (plug), Bareroot (field grown), Plug   |   |
| + (container-field grown hybrids,      |   |
| and/or Propagules (seeds, cuttings,    |   |
| poles, etc.))                          |   |
| Stock Type:                            |   |
| Time to Grow (from seeding until       |   |
| plants are ready to be outplanted):    |   |
| Target Specifications (size or         |   |
| characteristics of target plants to be |   |
| produced):                             |   |
| Propagule Collection (how, when,       |   |
| etc):                                  |   |
| Propagule Processing/Propagule         | Seeds exhibit morpho-physiological dormancy. (Baskin    |
| Characteristics (including seed        | 2002)   |
| density (# per pound), seed            |   |
| longevity, etc):                       |   |
| Pre-Planting Propagule Treatments      | Seeds are placed in cold moist stratification for 71 to |
| (cleaning, dormancy treatments,        | 112 days. (Baskin 2002)                                 |
| etc):                                  |   |
| Growing Area Preparation / Annual      |   |
| Practices for Perennial Crops          |   |
| (growing media, type and size of       |   |
| containers, etc):                      |   |
| Establishment Phase (from seeding to   |   |
| germination):                          |   |
| Length of Establishment Phase:         |   |
| Active Growth Phase (from              |   |
| germination until plants are no        |   |
| longer actively growing):              |   |
| Length of Active Growth Phase:         |   |
| Hardening Phase (from end of active    |   |
| growth phase to end of growing         |   |
| season; primarily related to the       |   |
| development of cold-hardiness and      |   |
| preparation for winter):               |   |
| Length of Hardening Phase:             |   |
|  |   |

| TT .: C. 101: : ( C                              |   |  |
|--|---|--|
| Harvesting, Storage and Shipping (of seedlings): |   |  |
| Length of Storage (of seedlings,                 |   |  |
| between nursery and outplanting):                |   |  |
| Guidelines for Outplanting /                     |   |  |
| Performance on Typical Sites (eg,                |   |  |
| percent survival, height or diameter             |   |  |
| growth, elapsed time before                      |   |  |
| flowering):                                      |   |  |
| Other Comments:                                  |   |  |
| INFORMATION SOURCES                              |   |  |
| References:                                      | USDA NRCS Plants Database                           |  |
|  | http://www.plants.usda.gov/                         |  |
|  | Kruckeberg, A.R. 1996. Gardening with native plants |  |
|  | of the Pacific Northwest. University of Washington  |  |
|  | Press, Seattle, WA                                  |  |
|  | Native Plants Propagation Protocol Database         |  |
|  | http://www.nativeplantnetwork.org/network/          |  |
|  | Carol and Jerry Baskin, University of Kentucky 2002 |  |
| Other Sources Consulted (but that                | Pacific Northwest Native Plant Resources            |  |
| contained no pertinent information):             | http://dnr.metrokc.gov/wlr/PI/npresrcs.htm          |  |
|  | Pojar, J., and A. MacKinnon. 2004. Plants of the    |  |
|  | Pacific Northwest coast. Lone Pine Press,           |  |
|  | Vancouver, BC. Miller Library QK144 .P65 1994       |  |
|  | Northwest Native Plants, Identification and         |  |
|  | Propagation, King County Department of Public Works |  |
|  | Surface Water Management Division                   |  |
|  | Propagation of Pacific Northwest Plants             |  |
|  | Rose, Cahchulski, Hasse OSU Press 1998              |  |
|  | Grow Your Own Native Landscape                      |  |
|  | Leigh, Native Plant Salvage Project                 |  |
|  | WSU 1999  |  |
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