On-Line Native Plant Propagation Resources

* Native Plant Network (NPN) *Propagation Protocol Database* Link to search page = https://npn.rngr.net/propagation/protocols Since 1999, the USDA Forest Service -- Reforestation, Nurseries, & Genetics Research (RNGR) department has maintained a database of native plant propagation protocols for North American plants. The purpose is to remedy the lack of "published information on how to propagate natives … by offering basic propagation information [and] a searchable database of propagation protocols." Example: enter "Philadelphus lewisii" to search for separate protocols for seed and vegetative propagation.

*USDA NRCS _PLANTS_ Database plants.usda.gov/ & *Plant Guides* https://plants.usda.gov/java/factSheet
Created by the USDA Natural Resources Conservation Service (NRCS), the PLANTS Database "provides … information about the vascular plants, mosses, liverworts, hornworts, and lichens of the U.S. … It includes names, … distributional data, species abstracts, characteristics, images, … and references." Can search the PLANTS database for culturally significant plants, endangered species, wetlands indicator status, etc. *Fact Sheets* give brief descriptions of each plant, uses, and growing information. Detailed *Plant Guides* include most of the propagation information. Example: Philadelphus lewisii https://plants.usda.gov/plantguide/pdf/pg_phle4.pdf

* Univ. of Washington student _Native Plant Propagation Protocols_:
https://courses.washington.edu/esrm412/protocols/protocols.htm Since 2007, students in ESRM 412 (*Native Plant Production*) have researched propagation protocols for Pacific Northwest native plants. The protocols are posted on-line "as a service to the restoration and propagation community" with the caveat that "**quality and content may vary**." Protocols are categorized as Trees, Shrubs & Vines, Forbs, Ferns, & Graminoids (grasses etc.). There is no data-search function, protocols are alpha by scientific name in each category. Example: In Shrubs & Vines category -- Philadelphus lewisii http://courses.washington.edu/esrm412/protocols/PHLE4.pdf

*USDA Forest Service RNGR _Woody Plant Seed Manual_ https://npn.rngr.net/publications/wpsm/genera
This Manual covers trees, shrubs, and other "woody" plants. Part I covers seed biology, harvesting, testing, etc. Part II has propagation protocols for 236 native and introduced woody plants, describing "growth habit; occurrence and use; flowering and fruiting; collection, extraction and storage of seeds; pregermination treatments; germination tests; and nursery practices." Example: enter "Philadelphus lewisii" to search for separate protocols for seed and vegetative propagation.

*Fire Effects Information System _FEIS Database_ https://www.feis-crs.org/feis/faces/index.xhtml
Provides "species reviews" for >1,200 species of plants and animals based on scientific literature about fire effects and fire regimes for plant communities in the US. 'Species Reviews' include information on plant and wildlife species' history, ecology, and relationship to fire. See "Botanical and Ecological Characteristics" for regeneration processes, site characteristics, pollination, & seed production, dispersal, germination, & establishment. Example: https://www.fs.fed.us/database/feis/plants/shrub/philew/all.html#BOTANICAL%20AND%20ECOLOGICAL%20CHARACTERISTICS

* Plants for a Future (PFAF) _Database of Edible, Medicinal, and Useful Plants_ http://www.pfaf.org/
The PFAF Database has descriptions of over 7,000 edible, medicinal, and useful plants world-wide. PFAF is dedicated to "researching and providing information on ecologically sustainable horticulture" to sustain "high species diversity and permaculture principles." Can search by scientific/common name, family, habitat, and whether it is edible, medicinal, or has other uses. May include brief cultivation and propagation information. Example: Philadelphus lewisii http://www.pfaf.org/user/plant.aspx?LatinName=Philadelphus+lewisii

Questions? Need help finding a specific protocol? Email nativeplanthelp@redbud-cnps.org