**Plant Propagation Protocol for *Baccharis glutinosa (Baccharis douglasii)***

ESRM 412 – Native Plant Production

URL: https://courses.washington.edu/esrm412/protocols/*2025*/BADO.*pdf*

| **TAXONOMY** | |
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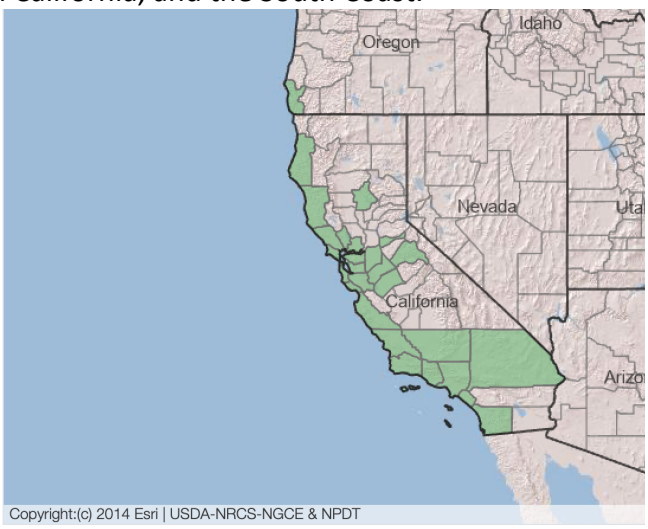
| Plant Family | Asteraceae |
| Scientific Name | *Baccharis glutinosa* |
| Common Name | Saltmarsh baccharis |
| Species Scientific Name | |
| Scientific Name | *Baccharis glutinosa*, previously called *Baccharis douglasii* |
| Varieties | None recognized by the USDA for this species |
| Sub-species | None recognized by the USDA for this species |
| Cultivar | None found for this species |
| Common Synonym(s) | None found for this species |
| Common Name(s) | Saltmarsh Baccharis, Douglas' falsewillow[6], Marsh baccharis[5] |
| Species Code (as per USDA Plants database) | BADO |
| **GENERAL INFORMATION** | |
| Geographical range | Naïve to Oregon and Mexico[2,10] and along coastal California US, specifically in northwestern California, the Sierra Nevada Foothills, the Great Central Valley, Central Western California, and the South Coast.[4]   |
| Ecological distribution | Occurs in moist salt marshes and riparian ecosystems |
| Climate and elevation range | Elevation data varies, however the widest distribution found seems to be 0m-1500m.[2,4,7] |

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| Local habitat and abundance | Recorded local habitat communities include Coastal Salt Marsh, Northern Coastal Scrub, Coastal Sage Scrub, Redwood Forest, Yellow Pine Forest, Foothill Woodland, wetland-riparian.[13] |
| Plant strategy type / successional stage | Tolerant of sandy soils and seasonal flooding.[12] likely salt tolerant due to name's sake and habitat type. |
| Plant characteristics | Life form: Shrub[1]<br>Flowering: White flowers[12] that bloom in the summer and fall (June to October).[9,13]<br>Growth rate: Fast[9]<br>This species may be dormant in the winter.[15] |
| **PROPAGATION DETAILS: FROM SEED** | |
| Ecotype | No information available about known ecotypes. |
| Propagation Goal | Plants |
| Propagation Method | Seed |
| Product Type | Plug (container) |
| Stock Type | Deepot 16[11] |
| Time to Grow | No determined total time to grow available. |
| Target Specifications | Firm root plug[11] |
| Propagule Collection Instructions | Seeds collected in fall and winter, when the seed heads begin to disperse.[16] Keep seeds dry during storage.[11] |
| Propagule Processing/Propagule Characteristics | Collect brown seed heads and gently crush them to release the seeds.[16] Alternatively, rub seed heads over a screen to release seeds and separate from other organic material. Reported germination success was about 50% and the expected transplant survival average was ~95%.[11] |
| Pre-Planting Propagule Treatments | No seed treatment[3], however some sources report cold stratification improving germination rates (4-6 weeks of cold stratification).[16] |
| Growing Area Preparation / Annual Practices for Perennial Crops | Conduct in a fully controlled greenhouse. Sow seeds (surface sow) in flat containers and water with automatic irrigation systems. Sow seeds in Early to mid-August. |
| Establishment Phase Details | Sow seeds in Early to mid-August.<br>Growth media: Use Sunshine mix containing peat moss, perlite, major and minor nutrients, gypsum and dolomitic lime.<br>Transplant germinant 14 days after sowing into final containers (Deepot 16) containing a growing media (peat moss, fir bark, perlite, and sand).[11] |
| Length of Establishment Phase | About 14 days to germinate and a month to finish establishment phase.[11] |
| Active Growth Phase | Recommended to prune plants 1 month after transplanting to promote branching. Move plants to a shade house.[11] |
| Length of Active Growth Phase | Dependent on objectives of a plant (or container). |
| Hardening Phase | Unclear if hardening is necessary. |

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| Length of Hardening Phase | Unclear if hardening is necessary. |
| Harvesting, Storage and Shipping | No information available |
| Length of Storage | No information available |
| Guidelines for Outplanting / Performance on Typical Sites | Outplanting site should be similar to the site seeds were obtained from. Information about timeline was unclear. |
| Other Comments | This collection of information for seed propagation is referencing *Baccharis pilularis* DC. (Species code: BACPIL) due to a somewhat shared distribution and shared family. It is unknown if this protocol information is applicable to this species. No information about *Baccharis glutinosa (*BADO) could be found. |
| **PROPAGATION DETAILS: VEGETATIVE** | |
| Ecotype | No information available about known ecotypes |
| Propagation Goal | Plant (from cutting) |
| Propagation Method | Vegetative |
| Product Type | Container (plug)[14] |
| Stock Type | Deepot 16[14] |
| Time to Grow | Total growth time required not found. |
| Target Specifications | Firm plug container (developed root system in container) |
| Propagule Collection Instructions | Collected between early April and late June. Cuttings used were 5cm semi-hardwood.[14] |
| Propagule Processing/Propagule Characteristics | Likely recommended to collect cuttings from species at outplanting site or sites similar to outplanting site. |
| Pre-Planting Propagule Treatments | Keep cuttings cool and moist until potted. To reduce the chance of pathogen contamination, dip cuttings in mild bleach solution for no more than 30 seconds.[14] |
| Growing Area Preparation / Annual Practices for Perennial Crops | In a fully controlled greenhouse, strike cuttings into a 4cm deep flat container to allow roots to develop. Misting every day until root develop.[14] |
| Establishment Phase Details | transplant cuttings into individual Deepot 16 containers. After transplanting, cuttings are placed in a shade house. Survival averages after transplantation are reportedly 80%.[14]<br>Growing media: mixture of peat moss, fir, bark, perlite and sand. [14] |
| Length of Establishment Phase | 70 days after initial sticking, however this is unclear. [14] |
| Active Growth Phase | No information available |
| Length of Active Growth Phase | No information available |
| Hardening Phase | No information available |

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| Length of Hardening Phase | No information available |
| Harvesting, Storage and Shipping | Cuttings should likely be transported soon after deemed ready for outplanting. |
| Length of Storage | No information available |
| Guidelines for Outplanting / Performance on Typical Sites | No information available for outplanting survival percentage. |
| Other Comments | This collection of information for vegetative propagation is referencing *Baccharis pilularis* DC. (Species code: BACPIL) due to a somewhat shared distribution and shared family. It is unknown if this protocol information is applicable to this species. No information about *Baccharis glutinosa (*BADO) could be found. |
| **INFORMATION SOURCES** | |
| References | 1.Natural Resources Conservation service USDA BADO plant profile https://plants.usda.gov/basic-search-results?resultId=76150694-b775-4d84-be03-535d2c0b93b5<br><br>2. The watershed nursery *Baccharis glutinosa* information https://www.watershednursery.com/nursery/plant-finder/baccharis-glutinosa/#tab-additional_information<br><br>3. L. Zhang. “Propagating Plants for Restoration”, Younger Lagoon Reserve UCSC. https://youngerlagoonreserve.ucsc.edu/PDFs/Propagating-Plants-for-Restoration.pdf<br><br>4.Treatment from the Jepson Manual (1993) UC Berkley https://ucjeps.berkeley.edu/cgi-bin/get_JM_treatment?609,781,783<br><br>5. UC Berkley Jepson Herbaria (2025) https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=1607<br><br>6. Flora of North America , eFloras.org http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250066179<br><br>7. Oregon Flora, Department of Botany and Plant Pathology at Oregon State University. https://oregonflora.org/taxa/index.php?taxon=3211<br><br>8. https://plants.usda.gov/DocumentLibrary/factsheet/pdf/fs_baha.pdf<br><br>9.Theodore Payne Foundation Baccharis douglasii information article. ( https://theodorepayne.org/nativeplantdatabase/index.php?title =Baccharis_douglasii ) |

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| | 10. https://plants.jstor.org/compilation/Baccharis.douglasii<br><br>11. B. Young. RNGR Plant Protocol *Baccharis pilularis* seed propagation https://npn.rngr.net/renderNPNProtocolDetails?selectedProtocolIds=asteraceae-baccharis-564&referer=wildflower<br><br>12. https://www.laspilitas.com/nature-of-california/plants/110--baccharis-douglasii<br><br>13. https://www.calflora.org/app/taxon?crn=11368<br><br>14. B. Young. RNGR *Baccharis pilularis* Vegatative propagation. https://rngr.net/renderNPNProtocolDetails?selectedProtocolIds=asteraceae-baccharis-706<br><br>15. El Nativo Growers *Baccharis douglasii* information. https://elnativogrowers.com/baccharis-douglasii-1g/<br><br>16. https://propagate.one/how-to-propagate-baccharis-douglasii/ |
| Other Sources Consulted | 17. https://propagate.one/how-to-propagate-baccharis-glutinosa/ Potential usage? Unsure of source material?<br><br>18. https://calphotos.berkeley.edu/cgi/img_query?where-taxon=Baccharis+glutinosa<br><br>19. http://floranorthamerica.org/Baccharis_douglasii<br><br>20. https://plantfinder.nativeplanttrust.org/plant/Baccharis-halimifolia Easter false willow |
| Protocol Author | Matilda W. Webster |
| Date Protocol Created or Updated | 05/25/2025 |