

Plant Propagation Protocol for: *Fragaria chiloensis*

TAXONOMY

Family Names:

Family Scientific Name: Rosaceae

Family Common Name: Rose family (NRCS Plants Database)

Scientific Names:

Genus: *Fragaria* L.

Species: *chiloensis* ssp. *pacifica*

Species Authority:

Variety:

Subspecies: *chiloensis*, *lucida*, and *sandwicensis*. (NRCS Plant Guide)

Cultivar:

Authority for variety/subspecies:

Common Synonym(s): Pacific beach strawberry

Common Name(s): Beach strawberry

Species Code: FRCHP

(GENERAL INFORMATION:

Geographical Range: Found along the Pacific Coast from Alaska to California. Introduced to Alaska, but native to Canada and continental United States. (ITIS Report).

Ecological distribution: Sand dunes and sea bluffs. Dune and grassland communities (NRCS Plant Guide). Full sun on coast, sun or partial shade inland.

Climate and elevation range: Maritime, coastal climate. Found below 200 meters.

Local habitat and abundance: Found along the Washington coast and along the shore of some Puget Sound Islands.

Plant strategy type/successional stage: Drought and salt resistant. Competitive in disturbed sites. Mid successional.

Plant characteristics: Perennial. Ethnobotanic: used as food and medicine by native peoples. Toothed, leathery, dark green leaves. White, five-petal flowers with yellow centers. Red, fleshy fruit. (Plant Guide).

PROPAGATION DETAILS:

Ecotype: n/a

Propagation Goal: Plants

Propagation Method: Stolons/plantlets, fruit to collect seed.

Product Type: Containers. Cuttings in a 3:1 perlite/vermiculite mix.

Stock Type:

Time to Grow:

Propagule Collection: Collect as mature red fruit. Seed is dark brown at maturity. Stolons with plantlets are collected between September 15th and November 15th.

Propagule Processing/Characteristics: Separate seeds entirely from fleshy bits of fruit. Soak seeds for 24 hours. Then stratify for 3 weeks, though this step may not be necessary.

Pre-planting Propagule Treatments: Sow seeds in greenhouse in the spring. Cuttings should be treated with rooting hormone, kept moist, and kept on a heated bench until roots develop.

Growing Area Preparation/Annual Practices for Perennials: Lightly fertilize during growing season.

Establishment Phase: Germination can take 4 weeks in a greenhouse.

Length of Establishment Phase: Quickly make full ground cover (Plant Guide).

Active Growth Phase: Short-lived. Spreads rapidly to 6 inches tall.

Length of Active Growth Phase:

Hardening Phase:

Length of Hardening Phase:

Harvesting, Storage, Shipping of Seedlings: Store dry, in cold storage.

Length of Storage: Long shelf-life.

Guidelines for Outplanting/Performance on Typical Sites: Bareroot. Ten inches apart in moist to dry conditions. Outdoor planting best in late winter to early spring, once the rains have started, in order to keep roots moist. May need protection from wildlife predators, like deer, gophers, squirrels, raccoons, and others. (Garden Guides). Keep runners pruned, as they can be invasive. May need to divide patch every three to four years to increase vigor. (Plant Guide).

Other comments: Generally, plants with smaller flowers produce more fruit, whereas plants with big flowers produce less. (PNW Flowers). Younger plants more vigorous and thus produce more fruit. (Plant Guide)

REFERENCES:

1. United States Department of Agriculture, Natural Resources Conservation Service Plants Database (<http://plants.usda.gov/java/profile?symbol=FRCHP>)
2. Integrated Taxonomic Information System (ITIS), (http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=24628)
3. United States Department of Agriculture, Natural Resources Conservation Service Plant

Guide--Pacific Beach Strawberry

4. Pacific Northwest Flowers (<http://www.pnwflowers.com/flower/fragaria-chiloensis>)
5. Garden Guides (<http://www.gardenguides.com/70278-grow-pacific-beach-strawberry.html>)

Other previous sources:

6. Fun Plant Facts: (<http://fact-sheets.com/plants/>)
7. Native Plants of British Columbia, (http://www.royalbcmuseum.bc.ca/nh_papers/nativeplants/index.html)
8. Oregon State University Landscape Plants (<http://oregonstate.edu/dept/ldplants/>)
9. Native Plants Propagation Protocol Database: (<http://nativeplants.for.uidaho.edu/network/>)
10. NatureServe Explorer: <http://www.natureserve.org/explorer/index.htm>

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