

JUST FRUIT:

Sea Berry



SEA BERRY

HIPPOPHAE RHAMNOIDES

RECOMMENDED CULTIVAR-TITAN.



Ecology



Member of the Elaeagnaceae family native to the Altai Mts. of S. Siberia.

Hardy to Zone 2 - 3

Mature height 6 - 13' depending on soil type. Sun/shade - requires full sun. Plant spacing - 6 - 8' in row spacing.

Undemanding, drought tolerant, hardy deciduous plant handles variety of soils due to its role as a nitrogen fixer in the orchard ecosystem. Known to grow at 14,000' elevations as well as along sandy coastlines. Astoundingly hardy temp range of - 45 to 103 degrees F. Small yellow flowers give way to orange fruit borne on thorny branches with a silvery gray willow-like foliage. Sea berry also works well planted as part of a windbreak or living fencerow.

Primary pollinator

Entirely wind dependent. Orient plants perpendicular to prevailing winds to ensure adequate pollination. Trees dioecious (either male or female), and will need a small grove of 3 female:1 male for adequate pollination (some growers also relay that a 8:1 ratio of female/male is also adequate).

Fruit

Bright orange late summer fruit actually a 'nut' is small and acidic.

Soil Conditions

Thrives in slightly acidic to neutral, sandy loam soil. Will also tolerate alkaline soil. Though drought tolerant, production suffers if soil is too dry when fruit is forming.

WHY GROW SEA BERRY?

Though widely unknown in the U.S., Sea berry has been grown for centuries in Europe and Asia as a food and medicine crop. Sea berry's remarkable adaptability - tolerates drought, poor soils, and even saline conditions, grows along river beds, valleys, high hills, coastlines and mt. slopes - combined with no significant pest or disease issues make it a wonderful addition to the organic orchard. Sea berries diverse adaptability parallels its many functions in the orchard including: an extensive root system capable of fixing nitrogen, soil erosion and land reclamation and restoration, wildlife enhancement, living fencerows/windbreaks.

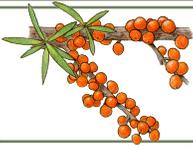
Seaberry benefits from a moderate annual pruning in spring. It will also tend to form sucker roots and shoots if left untended. Though seaberry can colonize bare grounds and landslides, the tree will benefit from a 1 - 3 inch mulch of woodchips or clean straw primarily to reduce weed competition. The biggest management challenge is harvesting due to sea berry's thorny branches. The thorns, however, make the plant

unpalatable to deer. While deer browse will be minimal, birds will feast on the berries. Bird netting may be needed for small plantings. Harvesting berries is comparable to that of harvesting raspberries. Mature plants can produce an average of 15 lbs/plant. Economic potential - low input, first harvest 2 - 3 years. Estimates for wholesale markets ranged from \$2.50 - \$6.00/pound fresh fruit. Gross income for Canada growers has been estimated at \$6,000 - \$7,000/acre. The plant is also appealing in the landscape industry. The combination of fruit shape and size, together with the contrast between the color of the fruit and leaves, contributes to the ornamental value of this plant.

Nursery suppliers - Jungs, St. Lawrence Nursery (Potsdam NY), Lawyer Nursery (MT), and One Green World, OR.

Remember to order both male and female plants.





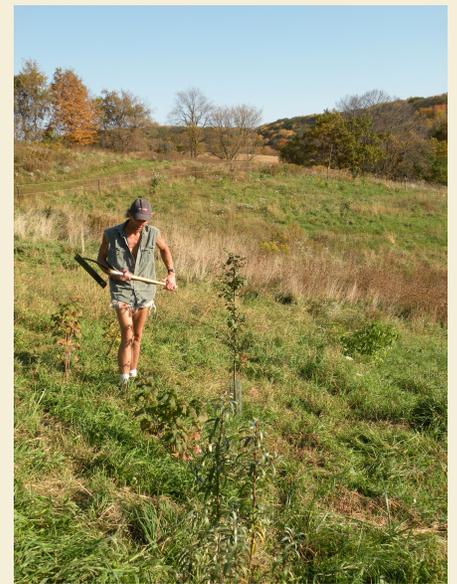
Sea Berry - Social Benefits, Tastes, Potential Uses

The health benefits of seaberry are key to marketability due to its high antioxidant and oil content. A worthy edible, herbal and medicinal plant for the organic orchardist, seaberry's rich vitamin and mineral content contain 9 times as much vitamin C as an orange, plus high doses of vitamins A B and E, beta-carotene, flavonoids, linoleic and omega 3 fatty acids. This not only adds up to practically unparalleled antioxidant performance, but also extraordinary potential for uses in modern medicine. Seaberry fruit is called treasure of bio-activity substances harboring many pharmacological effects on the cardiovascular and the immune system, while strengthening the spleen and stomach (Anon, 1999).

Medicinal uses of seaberry oil are well documented in Asia and Europe and clinical tests on its medicinal uses were first initiated in Russia during the 1950s. These studies reinforced the fruit's pharmacological functions as anti-microbial, and anti-inflammatory aides. The preparations from the berries are

also utilized to prevent gum bleeding, to help recuperate mucous membranes of the stomach and other organs. Cosmetics and skin care products made of seaberry are valued for their rejuvenating, restorative and anti-aging action. Additionally, as a topical ointment, seaberry oil is widely prescribed for eczema, burns, scars, wounds, and sun damage.

Seaberry also harbors a worthy niche in plant lore and human history. Chinese people were the first to use seaberry as a drug. Seaberry roots are revealed in the Sibu Yidain, an authoritative Tibetan medical text of the 8th century A.D., reporting that seaberry both 'tonifies yin and strengthens yang.' Legend beholds the seaberry as well. The ancient Greeks fed the leaves of the seaberry to their racehorses to improve the gloss of their coats. According to another Greek legend, Sea Buckthorn leaves were the preferable food of the mythical flying horse - Pegasus, equine spawn of the sea god Poseidon and the Gorgon Meusa, preferred the leaves of the sea berry to all other foods.



Rob weeding orchard guild at Hilltop Community Farm, young Sea berry seedling pictured in forefront. Photo by Erin Schneider



Though the fresh berries may not appeal to the layman's palate due to their unusual flavor, which is rather oily, musky and tart they are common garnishes with desserts, cereals, smoothies, yogurts, and creams. The berries are included in beverages, nutritional bars, tea, sauces and marmalades. Juice is another main use for seaberry. Use the juice straight with no other fruit and sweeten it with stevia extract powder or a little sugar. The addition of seaberry juice to a vanilla ice cream recipe makes a very nice dessert. The fruit is delicious as an orange sorbet, with an attractive deep orange-yellow color. Enjoy seaberry as a perfect palate-cleanser between courses, or an excellent dessert. Add 2 C of fresh seaberries to salsas for a fruit spiced treat, or combine with apples in your next pie.

- RECIPE SAMPLER -

Seaberry Juice Extract

1 cup water
1 cup sugar
2 cups sea-buckthorn juice - preferably freshly extracted
To extract your own juice, wash about a cup of seabuckthorn berries and puree in a blender. Press through a fine sieve. Then take some boiling water and pour over the seabuckthorn pulp on the sieve to extract more juice. Continue, until you've got 2 cups of liquid. (using boiling water help to extract more "juice matter" from the pulp.)

Pour water and sugar into a small saucepan and bring to the boil. reduce heat and simmer for 5 minutes to make a syrup. Cool. Mix seabuckthorn juice and syrup and churn in your ice-cream maker according to the instructions. Put it into the freezer to harden a little before serving. *recipe from seaberry-hippopharhamnoides.blogspot.com/ a blog about the cultivation of seaberry/seaberry for personal and homeuse.*