

Sea Kale: A Perennial Vegetable for Our Farms, Gardens and Tables

In recent years, late May has found us celebrating and enjoying the year's first bountiful harvest of broccoli. What's particularly unique about this broccoli isn't just that the harvest arrives relatively early in the season and with such abundance, but also that ***the harvest arrives with no expense or effort that season invested in activities and materials we often consider routine and necessary for most Spring crops in the northeast U.S.***, such as: seeding, greenhouses, grow lights, watering seedlings, preparing beds and transplanting, and protecting vulnerable young plants from pests, disease, and weather. This is because these are broccolis grown from the hardy perennial plant *Crambe maritima*, known as "Sea Kale". These plants - and this yearly spring harvest - once established only require seasonal weeding, mulching, and amending in order to provide well over a decade of production.

Sea Kale plants produce several shoots of harvestable broccolis every spring which are slightly more robust than broccoli raab, and share a very similar taste to broccoli and broccoli raab. One former vegetable farmer and caterer described her impression of this similarity with us after her cooking and tasting trials: ***"the broccoli was great... chopped and cooked, it looked and performed the same. Same crunch, same flavor, same shelf life"***. Another chef loved the florets as closed broccolis, as well as when they were full of flowers, and asked about ordering some for his restaurant the following Spring.

A native of northern Europe, Sea Kale is tolerant of cool, temperate climates, and established plants have survived temperatures of -20F or lower during Zone 4 winters in raised beds in northern Vermont. The plant can sprawl to more than 3' in height and width, and tends to be relatively resilient; but initial research and its native habitat suggest that it prefers a well drained, sandy or sandy loam soil. It can survive and perform well in soils which are not necessarily sandy - but it is important to achieve good drainage to assure successful overwintering by using methods such as raised beds in wetter environments and heavier soils. The plant prefers full sun, and is drought tolerant. It has demonstrated remarkable resilience to flea beetles, swede midge, and other fairly standard brassica pests. It may tolerate some degree of partial shade, but during propagation, transplant, and early stages of growth it can be vulnerable to being shaded out. Sea Kale can be sourced and propagated from seed, but is commonly reproduced using root cuttings as they are abundant on established plants and relatively easy to propagate (see our Crop Guide for more details on propagation, pests and disease, management and more).

Our recent [research](#) into the commercial viability of Sea Kale included measured harvests of the marketable portion of the broccolis on plants in their 3rd and 4th year in the ground resulting in a wide range of yields from 1.8 to 3.7 # / plan. This is the approximate equivalent of 4,764 to 9,768 # / acre in field plantings of 6' between rows and 2.75' between plants. The [New England Vegetable Management Guide](#) (UMASS Center for Ag, Food, and the Environment) estimates annual broccoli yields to be 5,000 - 10,000 lbs. / acre, but cites the 5 year avg. as 3,615 lbs / acre. **Though the ranges of our research's yields and the ranges of estimated yields through UMASS are relatively similar, the real 5 year avg. in the northeast as well as the relative immaturity of the Sea Kale plants harvested, suggest to us that yields of Sea Kale could prove significantly more productive than annual broccoli on an acre / acre and plant by plant basis.**

Sea Kale deserves a place in our gardens, on our farms, and in our kitchens. It is not a replacement for our annual broccoli - but a productive, resilient, and beautiful complement to the annual broccoli and broccoli raab we are more familiar with. Beyond it's edible and agronomic values, as a perennial crop, it also presents an opportunity for farms and gardens to further reduce tillage and soil disturbance. And even if one is not swayed by the remarkable production, tolerance of pests and disease, reduction of labor and inputs, and improved soil health provided by this plant - perhaps it's striking appearance will capture your heart: sprawling aqua-marine leaves, and white honey scented flowers which attract the eye, and pollinating insects, for weeks every spring.

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Places to consider publishing:

- <https://thenaturalfarmer.org/seeking-content-for-the-natural-farmer/>
- Permaculture Association of the Northeast
- Veg and Berry
- NOFA
- Edible VT
- Acres
- Permaculture Magazine
- NE Permaculture Listserv (via PAN)
- VAAF
- Annie Harlow
- Radio with Golden Turnip
- Savanna Institute Perennial Farm Gathering (February 4th)