

<http://www.grit.com/farm-and-garden/growing-broccoli-zm0z13jazgou.aspx>

## **Broccoli, by Lawrence Davis-Hollander, ©2015**

Broccoli is an ancient vegetable, yet it didn't gain much recognition until recently. To tell the story of this plant, we have to go to western and southern Europe, along the coasts of Greece and the former Yugoslavia (now Slovenia, Croatia, Bosnia and Herzegovina, Montenegro and Albania), where the ancestor of broccoli grew wild and still does today.

These plants, *Brassica oleracea*, or wild cabbage, were likely used as a food from Neolithic times. It is the parent and ancestor to a large number of cultivated offspring that are divided into seven or eight groups representing different plant forms. For example, the Capitata Group encompasses the common heading cabbages like savoy, green, red or spring greens varieties, with a terminal bud, botanically speaking. The Acephala Group includes most of the common leafy types like kale and collards, while kohlrabi is a swollen stem of the Gongylodes Group. Additionally cauliflower, [Brussels sprouts](#) and Tronchuda (Portuguese kale) each represent a different group. Broccoli is in the Italica Group, which, like cauliflower, is an inflorescence (flower cluster), yet the tissue has a number of single flower buds rather than being condensed into a solid head as it is in cauliflower. Altogether the plants of *Brassica oleracea* represent thousands of varieties, yet only one species.

### **Crucifers, All**

This species belongs to Cruciferae, or crucifers, a large plant family consisting of many species including edible types such as the mustards, horseradish, turnips, rutabagas, and many forms of Chinese vegetables, watercress and others. Crucifer refers to the four-part flowers in the shape of a cross. Flowers of many species are yellow or white, while others occur in a range of other colors. Some Cruciferae ornamentals include *Arabis* (rockcress), *Cherianthus* (*Erysimum* or wallflower), *Iberis* (candytuft), *Lunaria* (honesty), and *Matthiola* (stock).

[Broccoli](#), unlike many members of this species, is an annual. They can bloom the first year, although in mild climates they may be treated as biennials, and some types need vernalization, an induced shortening of the vegetative period, to develop properly. Winter-hardy relatives like kale or collards will flower the second year, producing lovely shoots of flower buds that can be regularly pinched off for a spring harvest and are excellent lightly steamed or added to salads. These buds somewhat resemble a skinny broccoli rabe, which to be clear is not a broccoli, but rather a relative of the turnip.

### **Early Cultivation**

Most folks think early broccoli cultivation occurred around 600 B.C. in Italy or Cyprus, although it is possible that it was cultivated much earlier. Often it is hard to distinguish which plant is being referred to in ancient literature, and there are few specific references to it. Broccoli formed

part of the diet of both Greeks and Romans. The Romans had two cabbage varieties known as *cauliculi* and *cymae*. The latter is believed to be a form of sprouting broccoli, or a stalked variety, and commanded a good price as it was reserved for wealthier Romans. The same became true for the large-headed cabbages the Romans developed, making them a valuable commodity.

A long period elapses before we hear much about broccoli again, perhaps because of the lack of distinction from other brassicas. It seemed to be largely confined to Italy until the mid-16th century when Catherine de Medici is credited with introducing it to France, although it is just as likely that her Italian chefs were responsible.

It did not reach England until around 1700. According to Philip Miller's *Gardener's Dictionary of 1724*, broccoli had been a stranger in England until recently and was known as "sprout colli-flower" or Italian asparagus. A few years later, Stephen Switzer mentions several types growing in his garden near London, two heading types and one loose sprouting, all from one kind of seed originating from Italy. According to the *Complete Farmer* published in 1767, "there are three sorts of broccoli cultivated in our kitchen gardens, the Roman or purple broccoli; the Naples, or white broccoli; and the brown or black broccoli."

In 1765, John Randolph of Williamsburg, Virginia, anonymously published his *Treatise On Gardening*, discussing in detail the cultivation of broccoli, mentioning "Roman or Italian Broccoli." He suggests "to boil them in a clean cloth and [serve them up](#) with butter, as Cauliflowers are. The stems will eat like asparagus and the heads like Cauliflowers." Thomas Jefferson had a copy of Randolph's book in his library and was cultivating broccoli by 1767, perhaps obtaining seed during his trip to France or via his many correspondences with European seed sources. As president, he complained that broccoli was only available commercially for two weeks in the summer. In the early 19th century, he used broccoli as an ornamental on his terrace, featuring rows of purple, white and green varieties.

Bernard McMahon of Philadelphia in his circa 1810 broadside catalog lists Early Purple, Early Green, Large Late Purple and White Cauliflower Broccoli, carefully distinguishing these from true Cauliflower. Later he adds Cape, White Cape, Early White and Early Purple.

### **Growing Broccoli in the United States**

The use of broccoli continued to expand in 19th-century England, and many recipes appear for it in cookbooks. However, in the United States, it really did not gain in popularity until the early 20th century. So while broccoli was available, it wasn't until the early 1900s when two Italian immigrant brothers, Stefano and Andrea Arrigo, made a concerted effort to grow and feature broccoli as a [major vegetable crop](#). Initial plantings were made in San Jose, California, and they promoted it on the radio. Their brand was named Andy Boy after Stefano's son Andrew. The company's Boston division shipped the vegetable to the North End neighborhood of Boston, which resulted in rapid sales. The D'Arrigo Bros Co., based in Salinas, California, is still going strong along with Andy Boy broccoli.

Varieties

[Calabrese Green](#) was introduced in the late 19th century to America and represents a typical Italian sprouting type, of which, in Italy there were many different varieties, color forms and maturation dates. Italian immigrants first brought seeds to America and cultivated them on the East Coast. The heads are not huge, about 5 to 8 inches, medium green, and continue to produce side shoots the rest of the season, hence the term sprouting.

Similar to Calabrese is De Cicco, another Italian heirloom introduced around 1890. De Cicco forms smaller blue-green heads, around 5 inches across. These broccolis tend to produce best when the weather is cool; they should be planted either in early spring or late summer and early fall. Both of these broccolis are “heading broccolis,” the type most often found in stores.

Early Purple Sprouting is currently described in catalogs as an old English heirloom, and it is likely a descendant of types grown in Italy for centuries and introduced to England in the 18th century. Hardiness probably increased as it migrated northwards and from cross pollination with wild northern types of *Brassica oleracea*.

This is a late-season type that does best in the fall for a spring harvest, as it needs a cold period, or vernalization, to yield well. Considered hardy in milder climates, it produces the following spring an abundance of purple flower buds and purple flushed to fully purple stems. These long stems are what was once called asparagus broccoli, as they bear a superficial resemblance to asparagus. In Zone 5, I’ve seen small heads in the late fall, and it is not hardy here. Yet over wintering with protection, such as in high tunnels, is an option, and soon modern hybrid forms of these sprouting types may enter the commercial market.

Purple of Sicily Cauliflower, or *Cavolfiore di Sicilia Violetto*, is another wonderful variety that produces fairly large heads in the autumn, with a distinct purple color that may not be uniformly distributed across the entire head. The heads weigh as much as 2 to 3 pounds. This is, as the name implies, an old Italian heirloom, and while it does have a cauliflowerlike appearance, it is a broccoli.

Purple Cape has large, dark green wavy leaves with firm purple heads, and is an autumn heading variety. A number of “Cape” types were known historically and were brought to England in the 18th century from the Cape of Good Hope in South Africa. While there is an African connection, these “Cape” types originated from Italian seed.

Unfortunately there is a dearth of heirloom varieties available, and it seems many disappeared early in the 20th century and then after World War II. This may be due in part to the demands of production farming for big consistent yields and thus larger and heavier heads of hybrid broccoli — as opposed to the sprouting types such as the “asparagus” forms — plus a preference for green coloration.