## **Colonial Williamsburg**

## Commentary on Carrots in the New World.

(referred to in 2004, not updated since and subsequently withdrawn from its website.)

## A. Carrot

Carrots (Daucus carota) have probably been known and used since prehistoric times. The wild carrot of Europe is white and branched and was originally used as a medicinal plant and perhaps as a fragrance herb. The purple and yellow varieties seem to originate in Afghanistan. The yellow or carotene carrot appears to be a mutant of the more common purple or anthocyanin carrot (Evolution of Crop Plants, Simmonds, 1995). The purple and the yellow carrots were not as bitter as the white carrot of Europe and these types form the earliest culinary carrots. It is from the yellow carrot that all modern varieties arise. In later years the French, in particular, develop very sweet forms of the white carrot, which are probably better known in Europe than in this country. In Williamsburg, John Randolph records in A Treatise on Gardening (1793); "there are two sortes, the Orange and white, the former being generally used, tho' the latter is much the sweetest kind." This is taken from Philip Miller's, The Gardeners Dictionary, written in England and from which Randolph borrows heavily and reflects a European rather than American sentiment as the orange carrot is almost exclusively used in this country.

The early history of the carrot in Europe is difficult to trace because the carrot and the parsnip both carry the name Pastinaca by Roman writers. This probably derives from the Latin verb pastinare, "to dig up" although it has also been speculated that it comes from the Latin noun pastinum, which was a two pronged dibble. In the first century AD Pliny, in his Natural History, describes a root; "resembling a pastinac asomewhat, called by us Gallicam, but by the Greeks daucon." The modern genus name Daucus derives from the Greek daucon while the species, carota, derives from the Latin word of the same name. The Dioscoridae Pharmacorum, written by Dioscorides in the first century AD and translated by Ruellius in 1529 uses carota to refer to Pastinaca silvestris. Pliny's description of the root as Gallicam may indicate that the improved, or less bitter carrot had its source in modern day France. This carrot is distinguished by Galen as Daucus pastinaca in the second century AD when he writes that the wild carrot is less fit to be eaten than the domestic sort (Edible Plants of the World, Sturevant, 1919). Apicus Czclius who writes a book on cookery title De Re Coquin in 230 AD is one of the first to adopt the word Carota to the plant.

The Roman carrot was almost certainly the white form of the root and as the wild carrot is native throughout much of Europe it was likely used by Europeans from a very early date. The Capitulare de Villis, prepared for Charlemagne around 800 AD includes carrots. The white carrot may have been carried to England by the Romans in the 2nd century AD and archeological excavations at the Viking settlement at Jorvile, (modern York) England has uncovered evidence of what may be carrot seeds. Aelfric, who writes a Latin vocabulary in England in 995 cites carrots. The purple carrot has probably been known in Afghanistan since 5000 BC and Eqyptian tomb illustrations from 2000 BC show what appears to be a purple carrot. The Egyptian king Merodach-Baladan has what may be a carrot listed among scented herbs from the 8th century BC so it is possible that the first use of the carrot was not as a culinary plant but rather as a fragrance or medicinal herb.

It has long been held that Moorish invaders first brought the purple, and perhaps yellow, carrot to Spain in the 12th century and the purple is recorded in France and Germany by the 13th century. However, an illustrated English translation of Dioscorides' manuscript from late in the eleventh century titled De virtutibus bestiarum in arte medicinae show what appears to be a purple carrot but little definitive evidence for the carrot, as a culinary plant, in England has been found until the 16th century. A Feat of Gardening by Master John Gardener (c 1400) does not list carrots among the vegetables he describes but Fromonds, Herbys necessary for a gardyn by letter (c. 1500) does include "karettes." Turners, The Names of Herbes (1548) writes; "Pastinaca is called...in englishe a Carot...Carettes growe in al countreis in plenty." In France, Ruellius in De natura stirpium (1536) describes purple and red carrots and in Germany, Fuchs, in De historia stirpiumm (1542) illustrates red and yellow carrots, although the red is definitely shaded towards purple. The half-long carrot, which eventually becomes the horn carrot, is first described by Matthiolus in Commentarii secuno (1558).

By the 17th century both the purple and yellow carrot are well established in England. John Gerard writes in the Herball (1597); "The root is long, thicke and single, of a faire yellow colour, pleasant to be eaten, and

very sweet in taste. There is another kind hereof like to the former in all parts, and differeth from it only in the colour of the root, which in this is not yellow, but of a blackish red colour." This seems to indicate that the yellow carrot starts to replace the purple by the beginning of the 17th century. After this time there is a development of many colors and shapes. Parkinson writes in Paradisi in sol (1629); "the roote is round and long, thicke above and small below, wither red or yellow, eyther shorter of longer, according to his kinde; for there is one kinde, whose roote is wholly red quite throughout; another whose root is red without for a pretty way inward, but the middle is yellow." He describes several yellow varieties with both long and short roots saying that one of the long yellow varieties is; "of a deepe gold yellow colour, and is the best."

The evolution of the orange carrot is confusing because the color sited by various authors as either orange or yellow are not always reliable. One of the earliest references to the orange carrot in Europe comes from the Menagier of Paris who, in the 14th century, writes a series of instructions for his wife. The carrot at this time was apparently fairly new to the market for he feels it is necessary to describes for her how one may recognize the carrot and adds that they are either white or orange. This is carrot would probably be considered yellow today.

The Dutch develop the orange carrot, which we are familiar with today, from the yellow carrot in the early 17th century. Popular legend has it that the orange carrot was developed as a tribute to the House of Orange, or the royal Dutch family, but it is more likely that the impetus behind the development of the orange varieties was that they would not give the purple brown coloration to soups that the more ancient purple varieties would. The orange carrot is introduced to England from Holland in the late 17th century (Weaver, Heirloom Vegetable Gardening, 1997). The earliest orange carrots had a long tapered root but by 1740 the Early Horn carrot is developed in Holland. This is a shorter carrot that terminates in a blunt point rather than the long tapered point of earlier carrots. By 1763 carrots were classed as one of four varieties. The long orange, and the three varieties of Horn carrot; Late Half Long, Early Half Long and Early Scarlet Horn. The modern carrots all derive from these four types (Simmonds, Evolution of Crop Plants, 1995).

By the 18th century the orange carrot is the primary variety grown for the table though other varieties are known. Stephen Switzer records in The Practical Kitchen Gardiner (1727) yellow or Sandwich, red and orange carrots. Bradley, in the Dictionarium Botanicum (1728) writes; "we have four or five Sorts of 'em, but I esteem the Orange-Carrot, and a kind which they have in the Isle of Wight, to be the best; besides which, we have the white Carrot, which one would not be without for the Rarity of it." Even in the 18th century the confusion over color descriptions persist in that yellow often seems to mean what we would call orange and red seems to refer to purple. For example, in Batty Langley's New Principles of Gardening (1728) he describes the two primary varieties of carrots this way: "Yellow Carrots...The root is of an Orange (rather than a limon) Colour." He also records that the root of this carrot is 22" long and 12 ½" in diameter. The red carrot he describes as; "its Root of a Blackish red without, and yellowish within; and is very seldom cultivated in our Gardens." This is probably in reference to the purple carrot, which by this time is disappearing in England. By 1768, when Philip Miller writes in The Gardeners Dictionary; "the Orange Carrot is generally esteemed in London, where the yellow and the white Carrots are seldom cultivated."

Carrots are introduced to Virginia with the first colonists. They are recorded by Whitacker, Good Newes from Virginia (1612), Berkeley, A Perfect Description of Virginia (1649), Bannister's Natural History (1681) and Glover's An Account of Virginia (1688). By the 18th century the orange carrot is the primary garden carrot of Virginia, the most common sorts being the Long Orange and the Horn. In Philadelphia, Bernard McMahon records in American Gardener's Calendar (1806); "There are several varieties, of the garden carrot; differing in the colour of their roots; such as orange, white, yellow and dark red. There is another variety called the horn-carrot, differing in the form of its root, the lower part terminating in a round, abrupt manner, and not tapering off gradually, like the others; this is the earliest sort, is of an orange colour, and very delicious; and should always been sown for the a first crop. The long orange carrot, is the best for a principle crop." While always a popular crop, Americans never develop the sophisticated taste for carrots that the Europeans do. In 1865 Fearing Burr records in Field and Garden Vegetables of America; "though not relished by all palates, carrots are extensively employed for culinary purposes." Henderson writes of carrots in Gardening for Profit (1867); "This may be classed more as a crop of the farm than the garden, as a far larger area is grown for the food of horses and cattle than for culinary purposes."

Varieties that we can still obtain today that would best approximate the 18th century carrot are the Scarlet Horn and the Long Orange. A small presence of white carrots in the homes of gentry or experimental gardeners would lend variety.