

# SIXTEENTH TO EIGHTEENTH CENTURY DEPICTIONS OF COLE CROPS, (*BRASSICA OLERACEA* L.), TURNIPS (*B. RAPA* L. CULTIVAR GROUP VEGETABLE TURNIP) AND RADISH (*RAPHANUS SATIVUS* L.) FROM FLANDERS AND THE PRESENT-DAY NETHERLANDS

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## Summary

Cole and neep crops are old crops in the Low Countries. The first archival records date from the 14th century. The crops have been described in herbals of the 16th and 17th century. During the 16th to 18th century they have also been depicted on paintings.

In a herbal of 1554 by Dodonaeus white, red and Savoy cabbages, cauliflower and kale have been described. Except for kale these cole crops have been observed in paintings. Some red cabbages are truly red, whereas most are purplish. Some have a silvery shine. All cauliflowers are white. One painting shows a cauliflower with a 30 cm long stem. Kohlrabi has not been described and not painted in the Low Countries during those centuries. This crop was and still is popular in Germany.

All vegetable turnips in paintings, made in Flanders and the present-day Netherlands are white. They have various sizes and shapes which may be genetically controlled and environmentally conditioned. Turnips in England had to be bronze-skinned.

A long, white 'root' with a red head, which has been both described and painted, has been identified as radish.

Note; We have chosen for the term root to describe the fleshy plant part which consists of hypocotyl and true root. The ratio hypocotyl/true root may vary.

## 1. Introduction

Cole crops and neep crops have been grown in the Low Countries and other countries for time immemorial. Zeven et al. (this volume) suggest that perpetual kale was the Tritian kale of the Romans and that this kale has probably been spread over Europe by these Romans. However, archaeological remains of these crops have not been reported. Sangers (1952, 1953), 'combing' through archival records kept in Dutch archives, and going through indices on archival collections, found the earliest reference to cole crops to date from 1318 /9. His reference mentions *Michiel, die coelman*, i.e. Michiel 'the cabbageman'. For 1334 similar names are found: *Jan die Coel man*, *Willem die Coolman* and *Hannekijn Coelman*. Much earlier references were already made to leek, onions, garlic, *warmoes* (vegetables), vineyards and orchards. Maybe *warmoes* refers here to cole crops (cabbage) as around 1375 mention is made of a *koolhof* or *warmoesrove* (a *hof* and *rove* is a garden). A reference of 1385 tells us about a *coeltwn*, i.e. a cabbage garden (*kooltuin* in present-day Dutch spelling). In 1393 *koolen* or *caboches* (= *kabuys*, i.e. cabbages) were exported to England.

## 2. Descriptions

It will be interesting to compare descriptions of cole crops and neep crops, made in the 16th to 18th century with depictions, made in the same period. So, in 1554 Dodonaeus (cited by Zeven & Brandenburg, 1986) classified the cole crops as White cabbage, Savoy cabbage, Red cabbage, *Roosken*, and *Ghehackelde* or *Gekronckelde kool* also named *krulkool*. *Roosken* is a type of red cabbage with a pale red pigmentation. *Ghehackelde kool* (jagged kale), *gekronckelde kool* (wriggling kale) or *krulkool* (curly kale) is the present-day kale (*B. oleracea acephala*).

Dodonaeus (1554) described the turnip as follows 'The root is round, thick, inside and outside white, occasionally the size of a human head, occasionally the size of a fist or less (*Die Wortel es ront/dick/van binnen ende buyten wit/ende somtijts een hoofd somtijts maar een vuyst groot oft oock mindere*). He also refers to *Steckrapen* as 'Napus hortensis', which as they are being cultivated around Paris also are called *Parijsche Rapen* (Parisian turnips). In France the name is *Naveau* or *Navet*, and in German *Steckruben*. They resemble the roundish roots of a type of radish. Munting (1696) refers to this crop as Napus, or *Steck-Rape*, or *Parijsche* or *Fransche Rape*. They are small, and long.

In Dodonaeus' 1608-issue he describes two types of turnips: 1. the common type *Gemeyne rapen* = 'Rapum vulgare', which is illustrated by a plant with a flattish root (see Toxopeus, 1979, Dodonaeus 1608 fig. 1), and 2. the long type (*Lanc kworpige Rapen*, 'Rapum oblongius'), which is illustrated by a plant having a long root (ditto, fig.2). As the names already indicate, the first is the common type, whereas the second type is rare. Dodonaeus further indicates that the size and the shape of the roots depends on the plant density. Dense stands result in long roots, open ones to round roots. This remark may have been borrowed from the Greek Theophrastus (370-284 B.C.) (Toxopeus, 1974) or been based on own experience.

### Cole crops, neep crops and rapes on paintings

Although the artists painted true to nature, they had no objection against composing their paintings with plant parts harvested in various seasons. This also is true for flower pieces where we find mixtures of spring, summer and autumn flowers. Similarly, we find red cabbages ready to be stored and deciduous trees with leaves in the background.

### *Brassica oleracea*

The first painter to depict a cole crop is Pieter Aertsen (1509-1675) who painted two leaves of cabbage, lying apparently astray in a meat stall. This painting dates from 1541 (Uppsala Universitets Konstsamliger, Uppsala). Later he and his nephew Joachim Beuckelaer (ca 1533-1574) and many other artists painted Vegetable stalls with vegetables including cauliflowers, white and red cabbages. When studying my collection of reproductions, the ratio cauliflowers/cabbage was 16/67 (Zeven & Brandenburg, 1986). The minority of the cauliflower may have been caused by the greater difficulty to transport and preserve cauliflowers than cabbages.

In general the crop products are quite good looking. Only a few red cabbages have 'wild' leaves, while a few cauliflowers have a loose curd (see some paintings by Floris van Dijck, 1575-1651, and Frans Snijders, 1579-1657). All cauliflowers are white or whitish, the latter shade may be caused by the dirt on the painting. Many of them are according to J. Koopman, (pers. comm. Enkhuizen, 1986) similar to the present-day Le Normand type. Adriaen van Utrecht (1599-1652) painted at Antwerp cauliflowers with ca 25-30 cm long stems (private coll.). This feature may have been common, but as cauliflowers were transported from the garden area to the cities, the market gardeners certainly will have removed these long stems. Other cauliflowers have conically formed stems with the thicker part near the inflorescences. This type is probably genetically short-stemmed.

Many red and white cabbages are shown. Many red cabbages have greenish leaves with purplish/reddish nerves. An example is the 'Vegetable stall' by Lucas van Valckenborgh (1540-1597, Kunsthistorisches Museum, Wien). Such a type must have been quite common. Perhaps breeding resulted in the absence of this trait. Another type has silvery red-greenish leaves. It has been painted by Albert Cuyt (1620-1691, 'Stal interieur', Dordrechts Museum, Dordrecht).

On a painting by Pieter Aertsen ('Vegetable and fruit stand', Boymans-van Beuningen Museum, Rotterdam) we see two colour types of red cabbages. In fact, what we call red cabbage is a purple cabbage. On this painting we observe truly red and purple cabbages. Truly red cabbages were obtained and were still traded as an undesired variation from cabbage fields at Amsterdam in the first decade of this century. As people were of the opinion that they were of inferior quality, the price of red coloured cabbages was lower than that of purple coloured ones. Hence the selection for and growing of purple forms. These truly red cabbages lacked a wax layer on the leaves. Around 1900 they had the vernacular name 'Jodenrode' and in the trade 'Erfurter'. Did this type have a name in the 16th century; was this type described by Dodonaeus (1554) as *roosken*?

On paintings by Joachim Beuckelaer (ca 1533-1574), Jan van Brueghel (1568-1625) and Frans Sniijders (1579-1657) we find Savoy cabbages with a white-yellowish heart. These painters were working in Flanders and maybe this type was common in the 16th/17th century there.

Not much can be said of the white cabbages except that many of them have been painted and that some of them are greenish. No curly kale was painted, although this kale type was described in Northwest European herbals.

Kohlrabi does not occur on a Flemish or Dutch painting. We have only one example on a painting by the German painter Jacob Samuel Beck (1715-1778, Puschkin Museum, Moskov, see Pistrick, 1984: intermediate of kohlrabi and narrow stem kale).

#### *Brassica rapa* L. (syn. *B. campestris* L.) cultivar Vegetable Turnips.

The taxonomy of *B. rapa* (syn. *B. campestris*) and *B. napus* is rather confusingly treated in the Dutch and maybe other literature, published before 1960. On paintings we only find turnips.

H. Toxopeus (pers. comm. 1994) was extremely helpful in identifying the various vegetable turnip types. He (Toxopeus, 1993) described the variation of this crop as follows 'the turnips vary widely in shape, from flat through globose to ellipsoid and cylindrical, blunt or sharply pointed, flesh (peel? ACZ) white, pink or yellow, apex white, green, red pink or bronze. All these characteristics may occur in cultivars in any imaginable combination.' The bronze pigmentation is caused by a mixture of green chlorophyll and red anthocyanin.

In our 'painting' material only white roots were observed. For root shape all shapes between globose and very flat, and rarely conically shaped were seen. Only on a painting 'The Holy Family' (Alte Pinakothek, München), the latter turnips are painted by Pieter van Avont (1600-1652) and Jan van Breughel I (1568-1625), who worked in Flanders. The same roots are found on the painting 'The Holy Family' (Koninklijk Museum voor Schone Kunsten, Antwerpen), which were painted by the same artists.

Due to this variation it is not possible to classify these turnips into groups. Another type could be a long type with a white root and a reddish head (apex, see below).

The globose (round) type resembles the present-day type 'Hilversumse witte' (H. Toxopeus, pers. comm. 1994). Some of them appear to have partly peeled tops or bottoms, maybe to give them a better appearance by removing the sandy rootlets. On some of the paintings a mixture of round to flat turnips are observed. This may indicate a genetically determined and environmentally influenced variation for root shape of a landrace of that time grown. On some other paintings the round and more flat roots are separately placed in the vegetable stall. Was this separation done after the harvest or were some landraces pure for root shape?

A new type, i.e. with a top-shaped root is painted by Jan A. Garemijn (1712-1799, 'Groentemarkt op het Pandreijjtje te Brugge', 1778, Groningemuseum, Brugge). Maybe this type reflects the one at the end of the 18th century in Flanders.

Except for the painting by Garemijn, I have obtained data from two groups of paintings, viz. group 1: 16 paintings by 10 Flemish painters, and group 2: 17 paintings by 13 Dutch painters working in the 17th century. When comparing these two groups of paintings for shape of the turnips we find, that in both groups all types described above are found in both groups. This may indicate that in the 17th century the turnip landrace(s) in the North (present-day Netherlands) and South (present-day Flanders) Netherlands had the same composition.

Another interesting painting 'A vegetable woman going to the market', was made by Flemish painter Jan Siberecht (Antwerp 1627-London 1703). He painted bronze-skin ned turnips. This skin colour was desired in England at that time and still is. When turnips were too whitish, they were tanned with soiled water (G.R. Dixon, pers. comm. 1994). Siberecht moved to England where he died. This painting must have been made in England.

#### *Brassica napus L.*

Swede and rutabaga were not seen in paintings. They are not seen in vegetable stalls of vegetable markets, and in farm and stable interiors. This agrees with Toxopeus (1979) who stated that *B. napus* was not yet present in the Low Countries at that time.

#### *Radishes?*

In paintings by P.A. van Rijsbrack (?-?), Jan Baptist Saive (1540-1624), Lucas van Valckenborgh (1540-1597) and Joachim Anthonisz Wttewael (1566-1638) we find a long pointed root with white flesh and a reddish head. This type is very difficult to identify as it closely resembles a type of turnip. This is also observed in the present-day French crop name *rave*, which has two meanings, 1. a synonym of *navet*, and 2. a homonym of a icicle radish (Vilmorin 1946).

Unfortunately, Vilmorin (1946) gives a black-white depiction of a long-rooted type, named 'Navet de Meaux'. Its apex is darker than the remaining part of the root. A colour picture is present of 'Navet de Champigny collet rouge' which has as the name states, a red top. But the length of the root is smaller than those shown on paintings.

A preliminary conclusion is that the type on the paintings cannot be the above-mentioned *Steck-Rapen* or *Parijsche Rape*, as these have been described by Dodonaeus as being small. More likely, it is icicle radish (*Raphanus sativus*). As radish was grown and eaten in the 17th century this crop could have been added by painters to their paintings. So, the above-mentioned type is very likely an early 17th century radish.

This conclusion is supported by Pistrick (1987) who mentioned that white icicle radishes with red heads were depicted on paintings such as made by Isaak Soreau (1604-?; Fruit stillife, Staatliches Museum, Schwerin, Germany) and Gerrit van Vucht (?-1697; Kitchen stillife, Staatliches Museum, Schwerin, Germany). The depicted radishes resemble those mentioned before.

A similar type without a red apex is seen in a painting earlier attributed to either Joachim Beuckelaer, or to the Italian artist Vincenzo Campi (1536-1591). The fact that this radish? is without a red apex may point to another area than the Low Countries, and hence to Vincenzo Campi as the painter.

### 3. Comparison between descriptions and depictions

Although *Ghehackelde kool* is mentioned in herbals this kale has not been depicted on paintings. It has been argued that this crop was 'too common' to be depicted. However,

red and white cabbages and cauliflower were also very commonly described. I have no explanation for the absence of *Ghehackel de kool*.

The descriptions of turnip suggest that the short, roundish to flattish types are the common types, whereas the type with long root is rare. The difference in frequencies is also reflected in the paintings. The same is true for the variation in root size and shape. As suggested differences may be conditioned by within-landrace genotypic variation, and by the environment. We only found white turnips on pain tings.

The type with a long white root with a red top is probably not turnip, but radish.

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