

BRIEF COMMUNICATION

Flower colour of two forms of *Brassica oleracea* in the sixteenth century

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SUMMARY

In the sixteenth century Savoy cabbage in The Netherlands had white flowers, while at present this cabbage variety has yellow flowers. In the same century, the branching form 'Ghehackelde kool' may have had cream flowers or white flowers like the present day Portuguese tronchuda kale and the Chinese *Brassica alboglabra*.

Key-words: *Brassica oleracea*, crop evolution, crop history, flower colour.

INTRODUCTION

The flower colour of *Brassica oleracea* L. is generally light to bright yellow. The light yellow colour is also designated creamy. The vegetatively propagated, rarely flowering perennial kale (var. *ramosa* DC) also has yellow flowers (Zeven in press 1989). At present there are only two forms of *B. oleracea* with white flowers. These forms are the tronchuda kale (var. *costata* DC) from Portugal and a Chinese kale (*B. alboglabra*) which, according to Phelan & Vaughan (1976), also belongs to *B. oleracea*. The genetics of the flower colour are as follows (Sampson 1966; Nieuwhof 1969):

<i>genotype</i>	<i>phenotype</i>
Wh— — —	white
whwh Cr —	yellow
whwh crcr	creamy.

Creamy is a difficult colour as it fades, especially in sunlight.

FLOWER COLOUR IN THE SIXTEENTH CENTURY

It might be of interest for the study of the evolution of the many types of *B. oleracea* to report that, according to Dodonaeus (1554), in the sixteenth century Savoy cabbage had white flowers, whereas it now has yellow flowers. Dodonaeus stated that red cabbage had yellow flowers, but did not mention any colour for white cabbage and cauliflower. For 'Ghehackelde kool' syn. 'Gecronkelde kool', he wrote that this form had 'another colour than the (yellow, ACZ) colour' of red cabbage. The 'Chehackelde kool' is depicted as a branching kale. Maybe it belonged to var. *ramosa* DC.

One wonders why Dodonaeus did not describe the flower colour of Ghehackelde kool rather than referring to it as 'another colour' than yellow, while he was acquainted with the white flower colour of Savoy cabbage of his time. Maybe he found it difficult to describe this 'other colour', since it was neither white nor yellow. This could mean

that 'Ghehackelde kool' possibly had cream flowers. If this conclusion is incorrect the 'Ghehackelde kool' must have had white flowers, in which case it may have been related to the Portuguese tronchuda kale and the Chinese *B. alboglabra*.

CONCLUSION

It is of interest to know that Savoy cabbage of the sixteenth century had white flowers and that 'Ghehackelde kool' may have had cream flowers. It is not known whether the sixteenth century Savoy cabbage belonged to a separate group of Savoy cabbages other than the ancestors of the present day Savoy cabbages, or whether, with time, the white colour allele, Wh, for unknown reasons and by unknown cause, was replaced by allele wh. The flower colour of 'Ghehackelde kool' is either cream or white.

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