

# ON THE ORNAMENTAL FEATURES OF SOME VEGETABLE CULTIVATED SPECIES

## VALOAREA ORNAMENTALĂ A UNOR SPECII LEGUMICOLE CULTIVATE

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**Abstract.** *The research was based on documentary research and field-level collections, the value of wild ornamental vegetable cabbage (*Brassica oleracea* L. var. *acephala* DC) and pumpkin (*Cucurbita pepo* L var *ovifera*). The sprouts were detected ornamental shapes by color, shape and appearance of leaves. Ornamental pumpkin shapes differ in plant habitus, size, shape, color and appearance of the fruits.*

**Key words:** *Brassica* genus, *Cucurbita* genus, biological evolution, variety, ornamental value.

**Rezumat.** *Cercetările au avut la bază studiul documentar și în teren, la nivel de colecții, privind valoarea ornamentală a speciilor legumicole varza (*Brassica oleracea* L. var *acephala* DC) și dovleacul (*Cucurbita pepo* L var *ovifera*). La varză au fost depistate forme ornamentale prin culoare, formă și aspectul frunzelor. Formele ornamentale de dovleac diferă prin habitusul plantelor, mărimea, forma, culoare și aspectul fructelor.*

**Cuvinte cheie:** *genul Brassica, genul Cucurbita, evoluție biologică, varietate, valoare ornamentală*

## INTRODUCTION

The art of gardening provides a shining example of the use of vegetable plants in decorative arrangement - Park Villandry in France, the Renaissance manner. Vegetable garden in this park was established since the Middle Ages, being cared for by monks from the nearby monastery. Much later, Dr. Carvallo pragmatist recreated the vegetable garden during the World War II, adding a total of about 250,000 plants that today are only for decoration. In the garden are planted 40 different vegetables. The best time of year to admire the garden is in autumn, when the decorative cabbage matures and the courgettes enchants us with their elliptical shapes, flattened and globular. (<http://www.gradinamea.ro/>).

Vegetable garden consists of nine areas that have different geometric shapes. In these areas, are vegetable plants with contrasting colors (leeks blue, red and white ornamental cabbage, pumpkin orange, green leaves of carrot etc.), giving the impression of a colorful game board. (<http://www.gradinamea.ro/>).

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Vegetable production is marked by a great diversity of species, cultural practices and traditions of use. The great biodiversity of the vegetables species and vast movement all over the world have allowed the evidence of many uses, besides the food, such as phytotherapy, cosmetics, landscaping etc.

Ornamental value of vegetables results from the morphological characteristics of the plant itself: size, general habitus of plants, shape, appearance, size and color of leaves, flowers and fruits.

At some vegetable species and types occurred mainly ornamental value with food value less important or insignificant. Such forms we meet the species like: green pepper, onion, cauliflower, zucchini, beans, parsley, lettuce, cabbage etc.

This study proposes an overview of ornamental shapes of zucchini, *Cucurbita pepo* L. var. *ovifera* and cabbage, *Brassica oleracea* L. var. *acephala* DC. The analysis of ornamental forms is made with special reference to biological characteristics, organical - physiological and ornamental, and how to use landscaping.

## MATERIAL AND METHOD

This study was based on analysis of existing information in the literature.

It was analyze a wide variety of forms including ornamental cabbage and ornamental squash. As a working method it was used comparative analysis.

## RESULTS AND DISCUSSIONS

### a. Results of ornamental cabbage.

**Biological features.** Ornamental cabbage is a biennial species, cross-fertilized. The root system is developed at lower depths compared with other vegetables.

The stem grows to 120-160 cm height, depending on variety. Leaves (formed at the beginning) at first forming a rosette on a short stalk about 25-30cm. At this stage leaves already have (shows) an ornamental value by form and color. In his evolution, stem grows vertically, and the leaves are arranged alternate and helical on it. In the stem apex is maintained a rosette of leaves similar to the original, which is continuously refreshed with leaves that start from the central bud. Leaves from the rosette are sessile or short petiolate, and those on the stems are long petiole.

Ornamental value is given mainly by the shape, appearance and color of the rosette leaves of the partially stripped.

The leaf shapes are like cabbage leaves used as vegetable plants. The limb is at first elongated oval or lanceolate, and then circle or heart surface more or less corrugated, and the edges full and pursed.

Leaves usually shows two colors, one of which is original and substantive (background), and the second overlaps the first.

The background color is different shades of green. This predominate from outer leaf (fig. 1). The second leaf color should be placed inside the shades of

white or mixed white and pink, pink or red (fig. 2), blue, violet blue and garnet (fig. 3).

Ornamental cabbage can be said (affirm) in landscape architecture in rabat, flats, mosaics, arabesques, borders, but also in pots or containers in various shapes: oval form with lirite leaf, embossed or obovate, spherical, with round leaf, lirite or embossed, round and flat-leaf embossed.



Fig. 1 – Light Green background

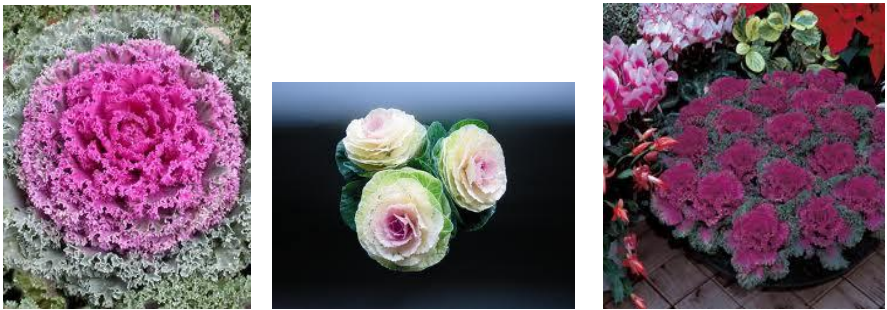


Fig. 2 – Shades of white, pink and red interior leaf



Fig. 3 – Shades of blue, violet-blue and dark red interior leaf

**Ecological and physiological characteristics.** Ornamental cabbage leaf has lower requirements to the factors of vegetation, compared with other

vegetable sprouts. Optimum growing temperature is 15-17°C, but plants vegetate at 5-10° C too. Mature plants are resistant to low temperatures of minus 8-10°C, so it can remain in the field over winter in areas without strong frosts. Requirements for water are high, due to water loss through embossed leaves. Plant water supplies during dry periods favorably influence the production of leaves and ornamental value.

#### **b. Results of ornamental gourd.**

**Biological features.** Zucchini is an annual species, with lush vigorous growth, forming compact bushes or widely scattered through the haulm, long and clips by enclosures.

Root is pivoting, over 1m L, lateral roots massed emitting layer of arable soil.

The stem is short and strongly branched or long branches, crossed by longitudinal sharp edges, covered with stiff hairs. The leaves are large, dark green, lobed palmate, long petiolate and covered with short stiff hairs. Unisexual flowers are large, long petiolate, colored in yellow. Male flowers appear earlier than females, and 2-3 are grouped at the base of leaves (Stan and Munteanu, 2003).



**Fig. 4 – Globular form**



**Fig. 5 – Flattened shape**



**Fig. 6 – Elliptical shape**



**Fig. 7 – Discoid shape**

Ornamental value of the zucchini plant is given by the habitus of plants, shape, size and color of fruit. Fruit shape presents (shows) several forms: globular, flattened, elliptical (fig.4-6), discoid, cordiform or pear-shaped (fig.7-9), turkish turban or crooked neck (fig. 10-11).



Fruit color is formed from mixtures thereof (fig. 12), or shades of one color (fig. 13).

Zucchini is required in landscape particularly through plant habitus, size, shape and fruit color. These important issues are taken into consideration for selection, placement and grouping them across the landscape must also add additional decorative effects of the flowers and leaves.

The housing lots, ornamental gourd value is usually grown in a separate sector, apart from an ornamental garden, including flowers, shrubs, trees, or directly on the lawn. It also can be used in interior design, where is required by color, size and shape of fruit by color, size and shape of fruit.



**Fig. 8 - Heart shape**



**Fig. 9 – Pear shape**



**Fig. 10 – Turkish turban shaped**



**Fig. 11 – Crooked neck**



**Fig.12 – Fruit bicolor**



**Fig.13 – Unicolor fruit**

**Ecological and physiological characteristics.** Minimum temperature for seed germination is 12-14°C and the optimum during the growing season of 25-28 C. Plants are destroyed at temperatures of -0.5°C. Front light has high demands, requiring a minimum of 40,000 lux. While claiming higher soil moisture, support relatively well the drought thanks (due) to the well-developed root system. Optimum soil moisture during the fructification is 70-75% of field water capacity (Indrea et al., 2009).

## CONCLUSIONS

1. Following the study conducted on the basis of existing research literature, there have been results on the value of wild ornamental cabbage and zucchini.

2. The ornamental cabbage forms have been identified characterized by color, shape and appearance of leaves and the pumpkin, ornamental shapes by plant habitus, size, shape, color and appearance of fruit.

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