RESEARCHES ON THE RESISTANCE TO THE RELEASE OF FLORIFEROUS STALKS FOR MANY BREEDS OF SALAD OF ECOLOGIC CULTURE

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Abstract

In the paper regarding the resistance to the release of floriferous stalks for many breeds of salad obtained in ecologic culture was followed the degree of release of the floriferous stalks. Depending on the rapidity of the release of floriferous stalks was followed the establishing of the optimum period of creating the culture so that on the market the salad could be present for a long period of time. Following this study the greatest resistance to the release of floriferous stalks was registered for a breed of Roman type - Blonde Marachaire and a breed of salad of head - Appia. These two breeds after a period of 60 days from the planting had 13 plants of 15 that didn't release floriferous stalks, aspect that prolongs the period of exploitation of the obtained production, because the seeding in the late spring in conditions of long day, release floral stalks before the normal creation of the heads.

Key words: breeds of salad, ecologic culture of salad, the release of floral stalks, demands of the salad towards the factors of the environment

INTRODUCTION

The salad is a plant pretty resistant to the low temperatures and which vegetates well at 16-20°C. The seeds begin to germinate at 2-3°C. The plants in rosacea phase with 5-6 leaves resist at temperatures of -5....-6°C without dying. They resist at temperatures of – 4 .... - 5°C, unhardened plants and the hardened plants preliminary resist up to - 12°C for the usual breeds and up to - 18°C for the winter breeds (Indrea, 1968). According to Chenkov and collab., (1974) the optimum temperature of growth and creating of heads can be of 20-22°C on the sunny weather, 15-16°C on a cloudy weather, and during the months of winter is of 12-13°C and even 7-8°C.

Because the early breeds are plants of long day, cultivated during the summer, they create quickly floriferous sprouts without creating head, exception being the summer breeds (Fulton, Great Lake, Bohemia), that are "neuter" from the photoperiodic point of view.

In case it is seeded in the late spring or when the cultures vegetate before due to the insufficient feed and humidity, in conditions of long day

the plants enter in vegetation and release floral stalks before the normal formation of the heads.

It were created neuter breeds compared to the length of the day, which give good results in the summer crop. The intensity and duration of illumination can become limited factors from November-February, the rhythm of growth is slowed down, moreover a weak illumination leads to the accumulation of nitrates in the leaves that can cause physiological disorders (www.wikigarrique.info).

MATERIAL AND METHOD

The experiment regarding the degree of release of floriferous stalks in order to establish the period of creating the crop was accomplished a vegetable microfarm certified ecologically situated in Husasau de Tinca, Bihor, in 2016. The first experiment, was planted at the end of the month May, and the second was created at the beginning of month September. Both experiments, monofactorial were arranged by the method of subdivided blocks, with 14 versions in three repetitions. Each version had a number of 15 plants.

The biological material was represented by 14 breeds of salad of many types, thus:

- Roman salad - Dark Green, Blonde Maraichere, Blonde Lente a Monter,
- salad of type Batavia - Long Stading Batavian and Jester,
- leaves salad was represented by Lola Rosa and Lola Bionda.

The rest of 7 breeds were breeds of salad of head respectively Anueme, Gloire de Mantes, Merveille de 4 Saison, Grass Blonde Peresuble, Laituie Silvesta and Appia breed, the last being also the witness of the experiment.

The processing of the experimental data was made by the analysis of the variation.

RESULTS AND DISCUSSION

In the table 1 are given the observations regarding the release of floriferous stalks of the breeds studied.

The seeding was made in 27.04.2016, and the planting in the definitive place in the soil of the glass house was made in 29.05. 2016.

Regarding this, were made observations at 30 days, at 40 days, at 50 days and at 60 days from the planting (table 1). The weakest resistance to the release of the floriferous stalks was of the breed Kwiek, that at 30 days from planting had 5 plants that released the floriferous stalk, at 40 days 9

plants released floriferous stalks, reaching at 50 days for all the plants to release the floriferous sticks.

At the opposite side, the longest period of vegetation, when it can be exploited were situated 2 breeds, on of the "Roman" type Blonde Marachaire and the salad of head Appia. For both breeds after 60 days from planting were released floriferous stalks remaining each of the 13 plants that had no the floral stick released.

Table 1.

The release of the floriferous stalks at 14 breeds of salad in different periods of vegetation

No. crt.	Breed	30 days	40 days	50 days	60 days	Plants remaining
1	Dark Green		5	10		0
2	Blonde Maraichere				2	13
3	Blonde Lente a Monter		8	7		0
4	Long Standing Batavian	3	12			0
5	Jester		2	10	3	0
6	Anuenue		1	9	5	0
7	Kwiek	5	9	1		0
8	Gloire de Nantes	2	8	5		0
9	Merveille des 4 Saisons		3	8	4	0
10	Lollo Rossa		2	6	7	0
11	Lollo Bionde		4	8	3	0
12	Grosse Blond Paresseuse	1	9	5		0
13	Laituie Silvesta		1	2	4	8
14	Laitue Pomme Appia				2	13

A good behavior at this chapter was that of the breeds Silvesta, Lollo Rossa and Amenue. The breed Silvesta after 60 days had 4 plants of 15 that released floral sticks. The breed Lollo Rossa released the floral sticks at 2 plants of 15 after 40 days and after 50 days the number of plans that released floral sticks were 6 of 15. For the breed Amenue a plant of 15 released floral stick after 40 days following that after 50 days to release 9 plants of 15 floral sticks.

CONCLUSIONS

The researches performed at the microfarm from Husasau de Tinca that had as biological material 14 breeds of salad, allowed that in the final to be elaborated a few conclusions:

1. For the supply of the market during the summer with fresh salad the breeds Appia and Blonde Maraichere are the most fit because after 60 days from planting the losses due to the floral sticks are minimum.
2. If the planting from the spring delays, the breeds Long Stading Batavian, Kwiek and Gloire de Nantes will be either avoided to be

planted, or will be the first harvest because they release flowers when the conditions allow it.

3. From the 14 breeds of tested salad, the breeds Long Standing Batavian, Kwiek and Gloire de Nantes need to be harvested after 30 days from planting in order to be avoided the losses regarding the production.

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