

**THE INFLUENCE OF THE CYCOCEL TREATMENT
UPON THE GROWING AND BLOSSOMING
OF THE *JASMINUM SP.***
**INFLUENTA TRATAMENTULUI CU CYCOCEL ASUPRA CRESTERII
SI INFLORIRII PLANTELOR DE *JASMINUM SP.***

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Abstract: In our country conditions, Jasminum sp. is present in greenhouses and homes as an ornamental pot plant; it is more appreciated for the flower perfume and the bright colored foliage. In order to reduce the plant vigour and to stimulate the ramification and the blossom it were made treatments with Cycocel in different amounts, from 0,05% to 0,25%. The biggest growth was observed at the control (untreated) and the high Cycocel concentrations (0,2-0,25%) induced a slow growing of the ramifications length, a better ramifications and blossoming, in the end achieving more compact and with plentiful blossoming plants.

Jasminum sp. is a voluble and woody plant, cultivated for their flowers perfume and the bright colored foliage. It is a plant with a fast and vigorous grows, especially in the spring and the summer time when the beautiful and odorized flowers appear in inflorescences in the top of the shoots. Regarding the appliace of the Cycocel, is known the fact that in repeated applications produce a slowness of the plant grows a shortness of the internodes ramifications length and a better blossoming. It is recommended to be applied in the growing faze and the effects of the treatments are visible after 3-4 weeks when the plants remains much smaller with short lateral ramifications realizing compact plants with precocity in blossoming. The Cycocel used amounts are variable depending on the flower specie (*Rhododendron* 1%, *Pelargonium* 5000 ppm, *Dianthus* 2000 ppm).

MATERIALS AND METHODS

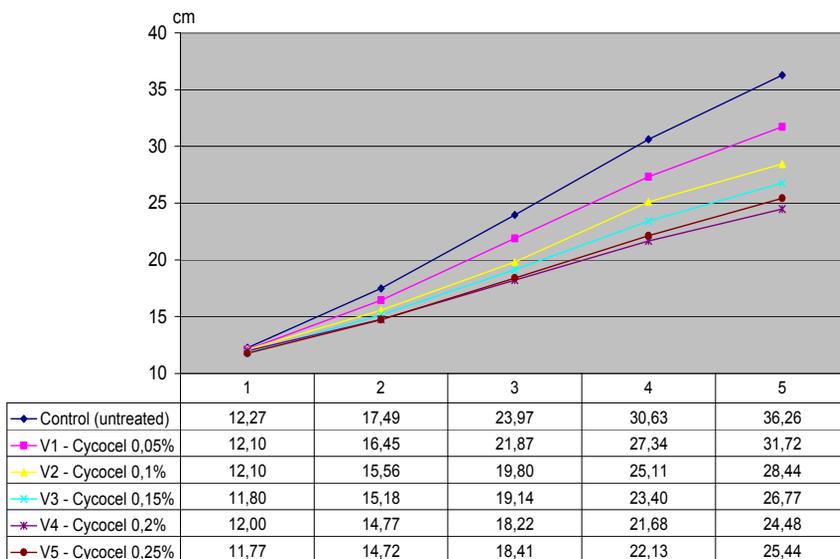
The experience was carried out in the frame of the flower greenhouse of the Faculty of Horticulture from Bucharest. The biological material was represented by the *Jasminum sp.* It were made treatments with Cycocel in different concentrations from 0,05 % to 0,25 %, resulting six variants. For planting, the substrate composition was realized from lay soil, manure, leaves soil and sand 3:1:1:1/4. The pot plants were maintained by watering and uniform pinching. The treatments with Cycocel were made at every two weeks (nine treatments), the product have been applied at the same time with the regular watering. The observations and the measures aimed the height of plants, the number and the length of the ramifications, the blossoming moment, the total number of the flowers in different stage etc.

RESULTS AND DISCUSSIONS

After about 6-8 weeks from the beginning of the Cycocel treatment, the growing plant rhythm was reduced, manifested by decreasing of the plant height

and also by the length of the shoots. The best results were obtained by the variants which were applied 0.2-0,25% Cycocel, which recorded the lowest values of the plants average height (Fig. 1), respectively V4 with 24,48 cm and V5 with 25,44 cm. The control was the most vigorous, with 36.26 cm.

Fig. 1 The dynamic height of *Jasminum sp.* treated with Cycocel

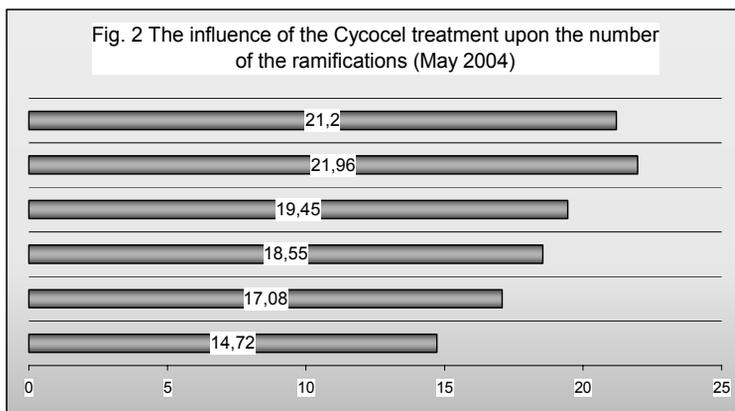


After the Cycocel treatment, it was observed that the plants have presented glossy dark green leaves and a bigger number of ramifications. The number of the ramifications (first and second degree) recorded continuous growing, distinguished the V4 variant with 21,96 ramifications in average and close to this variant, V5 with 21,2 ramifications (Table 1). Thus, it is obviously that concentrations of 0,2-0,25% Cycocel produced an increased number of ramifications at the plant level, comparatively with the control (untreated) which registered only 14,72 ramifications in average (Fig. 2).

Table 1

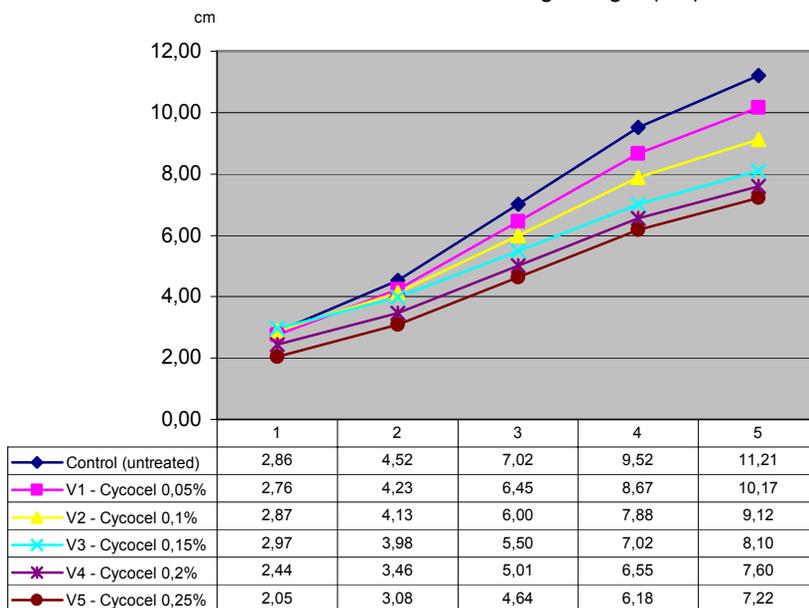
The dynamic of the ramifications average number at *Jasminum sp.*

Variant	Number of the ramifications				
	I	II	III	IV	V
Mt	3,72	5,96	9,32	12,51	14,72
V1	3,91	6,52	10,45	14,36	17,08
V2	4,79	7,52	11,63	15,71	18,55
V3	5,31	8,03	12,55	16,66	19,45
V4	6,45	9,55	14,19	18,93	21,96
V5	6,17	9,10	13,59	18,08	21,20

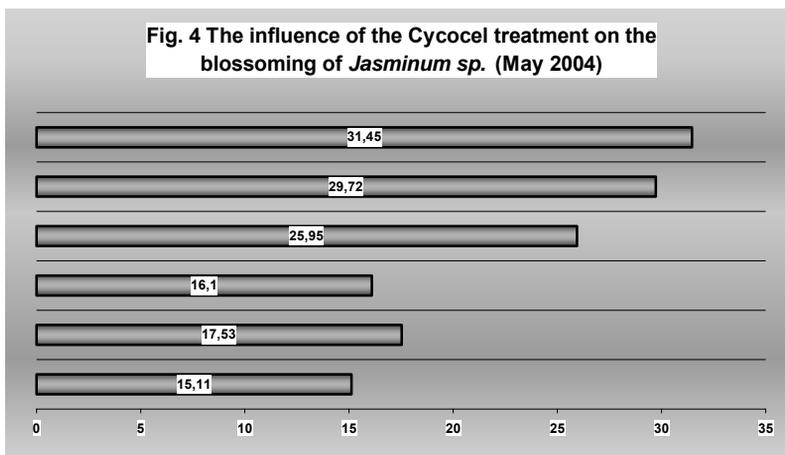


Upon the length of the ramifications, the high Cycocel concentrations had realized a growing decrease, finally obtaining more compact and plentifully blossoming (Fig. 3).

Fig. 3 The influence of the Cycocel treatments upon the ramifications average length (cm)



The number of flowers on plant significantly increased at all variants treated with Cycocel (Fig. 4). The V4 and V5 variant (0,2-0,25% Cycocel), recorded about 2 times more flowers on plant than the control untreated.



CONCLUSIONS

1. The application of the Cycocel treatments had as result an uniform slow down of the grows, the best results were obtained by the variants which were applied 0,2-0,25% Cycocel, which recorded the lowest values of the plants average height.

2. Because of the Cycocel treatments, it was stimulated the ramification of the plants, the ramifications number increased in the intense growing period.

3. Concentrations bigger than 0,15% Cycocel, proved a decrease of the ramifications length because of the inhibitor effect of the applied substance, finally obtaining more compact and uniform plants.

4. The treatments made induced a plentiful blossoming and an extended blossom period.

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