

The Study of the Correlations Between Some Productivity Elements in Garden Pea

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SUMMARY

The researches that have been made by Mușat et al. (2007) have shown the positive influence of the biostimulators on the yielding capacity of some crops. Bionat is a biostimulator with natural extract from plants. The study of the correlations between the quantitative features that contribute to the achieving of yield per plant have importance in setting up the most efficient means of yield quantification. The biological material that is the object of this study was the Kelvedon garden pea variety with two variants: V1- unfertilized and V2 - foliar fertilization by Bionat 0.2%. The experiment was located at the Botanic Garden of the University of Craiova during 2008. There have been made biometrical measurements for several elements with direct and indirect influence on the production: the plant height (1), the number of fertile pod/plant (2), the average length of a pod (3), the number of grains/pod (4), the number of grains/plant (5) and the weight of the grains/plant (6). With the not fertilized variant: the height of the plants was only positive correlated (not significant) with the number of the fertile pods. The number of pods was positively correlated with the number of grains/plant. The length of a pod was positively and significantly correlated with the number of grains / pod, and the number of grains/plant. was positively correlated with the weight of the grains / plant. With the foliar fertilized variant: the height of the plants was positive correlated with the number of pods, number of grains/plant and the weight of the grains/plant. The number of pods was positively and significant correlated with the average length of a pod, with the number of grains /plant and the weight of grains/plant. Negative yet significant correlations have made between the number of grains/pod and the height of the plants, between the number of grains/pod and number of pods and between the number of grains/ pod and the length of a pod.

The value of the correlation coefficients between the researched features

	2		3		4		5		6	
	V1	V2	V1	V2	V1	V2	V1	V2	V1	V2
1	0.366	0.800**	-0.143	0.333	-0.588	-0.249	-0.074	0.690*	-0.128	0.713*
2			-0.654 ⁰	0.744*	-0.723 ⁰	-0.142	0.794*	0.921**	0.449	0.700*
3					0.648*	-0.148	-0.418	0.645*	-0.175	0.509
4							-0.207	0.240	0.197	0.263
5									0.857**	0.743*
6										

REFERENCES

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