

Research Concerning the Influence of some Ecological Foliar Fertilizers on Spelta Wheat (*Triticum aestivum spp. spelta*) Crop Compared with Common Wheat (*Triticum aestivum spp. vulgare*)

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Abstract

Triticum aestivum ssp. spelta (spelta wheat) is a cultivated specie to obtain alimentary products and ecological meadows. Its physiological characteristics, rudimentary and resistance to bad conditions of vegetation determined its enlargement on greater and greater surfaces. There were tested six foliar fertilizers specific for ecological agriculture in order to stimulate production and several quality features.

Among the spelta wheat qualities there are noticed: glassy bean is well covered and gives a flour which is very rich in gluten. It is resistant to cold and diseases. It is appreciated that this form of wheat may be also of interest for several agricultural areas in Romania, with colder, wet climate, where it could behave better than other cereals. This fact is also confirmed by recent findings and contributes to the rentability of production; the fact that in the west of Europe there is a constant request growing for spelta wheat is also an advantage, beyond the quantities produced there, which contributes to the possibility of its valorification at a higher price than the price for common wheat.

There were sowed two types of common wheat: Apullum and Kappo adaptable to ecological agriculture together with Spelta wheat, specific for this type of agriculture, in the first decade of October. There weren't applied any chemical fertilizers nor treatments against weeds, pests and diseases.

Spelta wheat has a production potential of 3.000 și 4.000 kg/ha, as some valuable cultivars cultivated in our country. The qualities of rusticity were stimulated more by foliar fertilizers appliance compared to improved cultivars. If in the case of Apullum and Kappo there are obtained significant increases, distinct significant by applying Biofert or Maxiroot, at spelta wheat more fertilizers stimulate the production assuring significant differences and distinct significance difference.

Among the foliar fertilizers tested, Biofert and Biostar assure significant increases of production, the values being between 500-600 kg/ha, and with distinct significant difference of production is Terra Sorb and Glutaxin foliar fertilizers, the values being of 790-915 kg/ha.

In conclusions spelta wheat finds favorable cultivation conditions in Cluj area achieving productions between 3.000- 4.000 kg/ha and spelta wheat answers favorable to the treatment with foliar fertilizers with significant and distinct significance of production.

Key words: spelta wheat, common wheat, fertilizers, ecological production

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