



The influence of organic fertilizers on the quality of the main harvest concerning the ecologically cropped corn

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The ecological agriculture is one of the most efficient among the modern techniques of cultivation as alternatives to the present industrial agriculture and has its grounds in the responsible managing of soils. This method is the warrant for long term high production with important nutrition facts for the humankind.

What follows is an attempt to create a global perspective of the protein, starch and fat accumulation, depending on whether organic fertilizers have been involved in production. We would like to mention that extending the results of such research cannot be accomplished without taking into consideration their explicit stagnant characteristics, which is determined by the nature of the climate and agro technical conditions that have enabled these results. The starch, protein and fat content of corn grains vary pending on genetic factors, vegetation conditions and the technology involved. In addition, the data we have collected demonstrate the fact that both the production growth and the grain composition vary depending on the nature of the organic fertilizer that has been used. Manure and compost have increased the protein content in parallel proportion with the amount used in the process. Therefore, for the option 25 tones per hectare, the protein content was with 0.5 percent bigger than the one obtained using 15 tones per hectare. When the compost concentration was created using a dosage of 25 tones per hectare, the gain was 0.3 percent protein as opposed to the concentration of 15 tones per hectare.

In the case of the green fertilizer variant, the protein content was higher, meaning 8 percent, due to the positive influence of the nitrogen remains of vetch. The starch content has moved to and fro in opposed relation to the protein content and has registered values between 63.2 and 66.3 percent.

Even under the influence of the organic fertilizers, the fat content of the corn grains hasn't listed relevant increase. This lack of alteration in the fat content is explained by some feature of organic fertilizers to maintain an almost steady relation between the growth of the endosperm and the embryo (the organ where the fat is accumulated), through providing most favorable conditions for the physiological processes taking place in the plant.