Nitrogen content in tomato fruit after NPK fertilisation

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Tomato is one of the popular and most consumed vegetable in the world. It is consumed as salad with other leafy vegetables, and as stewed, fried, and baked singly or in combination with other vegetables. It is also rich in nutrients and calories. Consumption of tomato and its products can significantly reduce the risk of developing of colon, rectal, and stomach cancer. Because the mineral composition of tomato depend on the amount and type of nutrients taken from growth medium, such as soil, it is necessary that adequate amount of nutrients should be available for the production and nutrient content of tomatoes.

Rate and type of nutrients applied in the form of fertilizers should be adjusted after analyzing the nutrient contents of soil and plant samples. Tomatoes are regularly fertilized with N, P, K from liming to adjust soil pH. Optimum soil pH for tomatoes cultivation is between 6.0-6.5. In this paper was to observed the nitrogen content in tomato fruit after NPK fertilization. The experience was done in a cambic cernosium soil, with low acidity reaction and the high natural fertility potential favorable vegetables cultivation. The study was performed on control soil samples (without fertilizers) and soil samples after differentiated NPK fertilization in variable dozes: N30P30K30, N45P45K45, N60P60K60, N120P60K60. A field experiment was using tomatoes samples in different precocity steady: early (Export II) and middle tardy (Campbell1327). Nitrogen content in fruit varied from 0.27-0.54 ppm; the highest concentration was found in N45P45K45 doses fertilization and the lowest was in control. The tomato sorts not were influences the nitrogen assimilation in tomato fruit.