The Influence of Fertilization Systems of The Typical Preluvosoil on Golden Delicious and Starkrimson Apple Crops

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Abstract. The annual production results obtained in the experimental years, were constant enough between apples variety, but were a lot different once the fertilization systems have been applied. The biggest productions were obtained by applying the organic-mineral fertilization system or the organic-mineral and manure fertilization system. Complex mineral fertilization assures great production by applying at the same time the three primary macro elements: nitrogen, potassium and phosphorus. The best production was obtained using higher doses of N\textsubscript{120}P\textsubscript{100}K\textsubscript{120}. The organic-mineral fertilization puts in value the interaction of the organic with the complex mineral resources and assures maximum fruit production at the following combination: 40t manure/ha applied periodically (once every 3 years) with a dose of NPK complex N\textsubscript{100}P\textsubscript{80}K\textsubscript{100}. The production was differed by the NPK doses applied. The analysis of the production differences shows the efficiency of the fertilization systems that were applied and the interaction between soil and plant. The apple varieties production proved to be efficient to the fertilization systems used and to the active substance doses too. To improve the production of apples on the typical preluvosoil in Reghin is recommended to use NPK interactions with manure. The positive action of the two alternative fertilization systems is obvious. The biggest production obtained with the help of these fertilization systems applied on the two varieties of apple: GOLDEN DELICIOUS and STARKRIMSON were at the STARKRIMSON variety.

REFERENCES