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PRODUCTIVITY OF SUGAR BEET HYBRIDS UNDER THE CONDITIONS OF RIGHT-BANK FOREST-STEPPE OF UKRAINE

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Under these conditions, it is important to investigate the growth and productivity of different hybrids of sugar beet after organic nourish sources. Therefore, the growth and yield of different sugar beet hybrids were investigated in crop rotation, where all crops are grown by nutrients of organic mass of sideline products of preceding crops, green-manured fallow and postharvest green manuring.

Analysis of the nutrition balance in the crop rotation shows that nitrogen, phosphorus and potassium in the soil layer of 0-60 cm is sufficient for implementation of the yield of water, which is obtained by crops, due to the precipitation and constant deposits of moisture in the lower soil layers (0-150-200 cm).

Hybrids of sugar beet were grown in the third field of six-field crop rotation. The preceding crop was winter wheat, which was grown on green-manured fallow. The amount of nitrogen after tillage of green manure crop in the soil layer of 0-40 cm (top + root mass) is 300-340 kg/ha, phosphorus 65-80, potassium 180-220 kg/ha. We don't calculate the nitrogen that leave in the soil, nodule-forming and associative bacteria. There are other sources of nitrogen. Wheat except of yield in crop rotation 60-65 hwt/ha, makes with grain 140-160 kg/ha, phosphorus 56-64, potassium 90-120 kg/ha. Nutrient status of sugar beet was sufficiently high. It is important to note, because the majority of farms that cultivate sugar beets on small areas due to the lack of funds does not have the possibility to use heavy rates of fertilizers. Such farms should use the optimum variants of organic and biological technologies broader, they need such hybrids of sugar beet, which would more fully use this organic background and natural potential of Ukrainian soil and would respond to the application of certain elements of modern technology of cultivation of this crop.

The most intensive root mass accumulation during this period was observed in hybrids Bilotserkivskyy MS – 57-78 g and Shevchenkivskyy – 99 g. Obtained data indicate that these hybrids accumulate mass in the second half of the growing season, which indicates their late maturity. Hybrid Umanskyy MS – 76 should be noted, which has stable increments of root mass regardless of its growing in different years.

The yield of hybrids depends on many factors, both agrotechnical and hereditary. During the creation of equal conditions of growing, genetic potential of hybrids created by domestic breeders is in the forefront. On average for two years the highest sugar content showed hybrids Umanskyy MS – 76 and Slovyanskyy MS – 94 – 16.2 %. The lowest sugar content had hybrid Bilotserkivskyy MS –57 – 14.4%. Accordingly, during this period, sugar harvest amounted in hybrid Ukrainskyy MS –70 – 59.2 hwt/ha , Slovyanskyy MS – 94 – 56.8 , Umanskyy MS –76 – 57.1 hwt/ha.