

Annotation

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Productivity of white sweet clover in pure and compatible crops with annual cereal crops

Nowadays the urgent problem in the intensification of livestock is income of the digestible protein feed. Its deficiency in ration promotes deterrent the obtained of high performance and quality feed. Organization of production feed based on grass-legume mixture of annual and perennial crops is one of the solution to this problem. Commonly used among legume plant for grass mixtures white sweet clover. The results of domestic and foreign scholars show that the cultivation of white sweet clover in compatible crops with cereal forage crops is high performance and quality.

The issue of growing white sweet clover in compatible crops with annual cereal crops is not disclosed and requires a study in the Right-Bank Forest-Steppe. There are no data about the impact of norm of seeding of white sweet clover and optimal fertilization on yield capacity and quality of feed.

The purpose of research are the cultivation of white sweet clover in compatible crops with annual cereal forage crops and determine the impact of cereal components, norm of seeding of white sweet clover and fertilization on the yield capacity in the Right-bank forest steppe.

The accounting at the point of harvest was performed by the weighing of overground green mass of every variants.

The harvest level of all variants of compatible cultivation with the annual cereal crops was exceeded than the level of pure white sweet clover. During the years of research a raise of the harvest, depending on the component of compatible crops was varied compared to a single species planting of white sweet clover and was from 3.1 to 8.3 t/ha.. The highest it was on the variant of compatible cultivation with sudan grass.

The yield of forage crops was highest in pure and compatible crops with fertilization $N_{60}P_{90}K_{90}$. The growth of the harvest, compared with the control (without fertilizer) in pure white sweet clover was 2.05 t/ha, and in variants of the compatible crops with corn, millet, sudan grass and sorghum: 2.4, 1.6, 2 and 1.9 t/ha.

An increase of norm of seeding of white sweet clover from 16 to 22 kg/ha was contributed to some decrease of productivity pure and compatible crops.

Overall, the most productive variant was the compatible crops with sudan grass with norm of seeding of white sweet clover 16 kg/ha, fertilizer $N_{60}P_{90}K_{90}$ and amounted 21.6 t/ha. The harvest of a single species planting of white sweet clover with similar norm of seeding and fertilizing – 13.9 t/ha.

Key words: *compatible crops, white sweet clover, corn, millet, sudan grass, sorghum, seeding rate, fertilization, yield capacity.*