

ELEMENTS OF ENSILAGE TECHNOLOGY OF ANNUALS FORAGE CROPS MIXTURE WITH EXTRA HUMIDITY BY THE USE NEW SILAGE STARTER

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In the search experiment the effect of different doses of bacterial starter KT-L 18/1 (Chernihiv ISHM and APV NAAS) on the preservation of nutrients in silage made of annuals forage crops mixture in the Carpathian region was investigated.

A mixture of fodder crops (oats - 77,6%, spring vetch- 17,9%) was produced on the fields of DP "Dh Obroshino" in the Pustomyty district of Lviv region. In laboratory animal nutrition and feed technology in glass containers three variants of silage were laid: control and two doses of starter KT-L 18/1: research I - 25 mln of viable cells per 1 kg of green mass and research II- 50 million of viable cells per 1 kg of green mass. Before researches determination of composition and content of nutrients in crops mixture has been made After 90 day experiment, chemical composition and content of nutrients in silage were determined Based on the data on the chemical composition of each variant, the level of nutrient losses in the process of ensilage has been determined.

The optimal doses of bacterial composition KT-L 18/1 for preparation of SILAGE from high humidity mixture have been determined. It was established that used doses of starter KT-L 18/1 - 25 and 50 million viable cells per 1 kg of green mass with high humidity (78,5%) promoted optimal level of active acidity in SILAGE and kept the ratio between milk and acetic acid at 68: 28%. It was shown that starter KT-L 18/1 dose of 25 million viable cells per 1 kg of green mass leads to optimization of fermentation processes and stored dry matter content in silage up to 97.7%. By the use of a double dose of starter KT-L 18/1 (50 million viable cells per 1 kg of green mass), the dry matter content increased by 0.3 abs% to the green mass.

This work is a continuation of the cycle of studies testing new probiotic starters as an alternative to chemical preservatives at ensilage mixture with extra humidity, which are typical for the Carpathian region.

Keywords: GREEN MASS, NUTRIENTS SILAGE FERMENTS, ANNUAL FORAGE CROPS, DRY MATTER, SILAGE QUALITY.