# GRASS CONSERVATION AND EFFICIENCY OF SILAGE ADDITIVES

Jonas Jatkauskas, Vilma Vrotniakienė, Jurgis Kulpys

**Summary.** In most parts of the world, forage conservation is a key element for productive and effective ruminant livestock farms. Forage is preserved as either hay or silage.

The studies of cattle herds in lithuania showed that small farms of 1 to 5 milking cows form even 76.87 percent of total farms. Haymaking is dominant in those farms and ensiling has been considered to be too difficult there because of forage characteristics, small quantity of cattle or tradition.

The farms of 10 milking cows and more, in which several trends in harvesting forages for silage are notable form only 15.15 percent of total farms.

A newer method of making silage is the wrapped bale. Recent work under experimental farm conditions suggests that bale silage fermentative quality and energy value were better in comparison with ordinarily made silage. The application of chemical additives showed to be positive in the fermentation process. The ph was lower and content of lactic acid in treated silage mounted up. The content of acetic and butyric acids decreased markedly in chemically by treated silages compared with the non–treated silage. Positive was also the effect of preparation decreasing the proteolysis which was achieved in the non–treated silage 7.05% and in chemically treated silage 5.47% $nh_3$–n out of total n.

The improvement of the course of fermentation became evident also in the decrease of dm losses and in increase of energy content and better performance of fattening bulls which were offered the treated silages.

**Keywords:** forage, hay, silage, additives, fermentation, fattening bulls, performance.