

WHOLE PLANT SILAGE NUTRITIVE VALUE FROM SPRING BARLEY OF DIFFERENT MATURITY

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Summary. The trials were carried out in Research station and TEMPUS laboratory of Lithuanian University of Agriculture during 1997-1999. Taking cereals for fodders is important not just to get high and steady yields but as well to ensure its quality which depended not only from chemical composition of fodder but also from the assimilation of it by the livestock. That's way was important to investigate possibilities of increase of spring barley fodder yield accordingly to their growth and development peculiarities. The aim and task of the experiment were to investigate use of spring barley harvested at early milk, milk, late milk-early dough and dough stages of maturity, for silage making and receivable silage quality.

Spring barley silage chemical composition depended on cereal stage of maturity. Preparing whole plant silage from more matured spring barley biomass was got silage or haylage with higher concentration of dry matter. Whole plant silage produced from cereals of later stages of maturity – late milk-early dough and dough stages of maturity, has less crude protein and crude ash concentration, lower digestibility *in vitro* by ruminants and fewer accumulated metabolizable energy MJ kg⁻¹ of silage dry biomass. Higher nutritive value silage was get from spring barley of late milk-early dough stage of maturity by evaluation of metabolizable energy.

Key words: spring barley, stages of maturity, whole crop silage, nutritive value.