THE INFLUENCE OF FORMIC ACID ADDITIVES ON THE QUALITY OF SILAGE FROM DIFFERENT PLANT MATERIAL

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Summary. Recapitulating the results, it should be noticed that the tested preparations containing formic acid had a variable effect on the quality and nutritive value of silages. The final effect of Kemisile preparations depended on the type of ensiled material and ensiling technology. In the silages produced on a laboratory scale, the preparations had no influence on the chemical quality, although they were determined to have a beneficial effect on the intake of silages by animals. No significant effect of the concentration of formic acid in the preparations on their effectiveness was observed.

However, one additive (Kemisile 2000) produced much superior results when applied in production of round-bale silages. Addition of Kemisile 2000 for ensiling grasses in bales effectively improved the quality and energy value of silages made from wilted fodder (28.64 % dry matter). In drier grasses, the effect of Kemisile 2000 was less evident.

Kemisile 2000 had an ideal effect on the quality of silage from wilted red clover, reducing fermentation and increasing the ratio of lactic acid to total acids.

Key words: silage, formic acid, nutritive value.