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THE QUALITY OF GRASS SILAGE MADE WITH THE ADDITION OF BIOLOGICAL STIMULANTS OF FERMENTATION

Key words: aerobic stability, bacterial inoculants, fermentation, grass silage, nutritive value, quality

Summary

An experiment was carried out to examine silage fermentation, aerobic stability and nutritive value of grass silage, which was ensiled in big bales either without (control) or with two bacterial silage additives containing homo- and heterofermentative lactic acid bacteria. Silages were analysed for dry matter, pH, chemical and microbiological composition and aerobic stability. Silage was also tested in feeding experiments on heifers. The addition of inoculants increased the lactic and acetic acid and decreased the butyric acid concentrations in silage. Among used additives higher efficiency in terms of impact on the ensilage process and improvement of silage quality was stated in case of microbiological-enzymatic additive. No significant improvement of aerobic stability was found. The additives had no effect on silage intake and mass gain of animals fed with tested silages.