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Effect of addition of lactic acid bacteria on quality of rye silage harvested at early heading stage

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Abstract

This study is aimed to analyze the effect of lactic acid bacteria inoculants (LAB) on quality of rye silage fermentation, harvested at early heading stage. The nutritive values were similar between the control and LAB inoculated silages. The pH of rye silage in LAB inoculation significantly decreased as compared to control ($p < 0.05$). In addition, the content of lactic acid in LAB inoculation significantly increased ($p < 0.05$), but the content of acetic acid in LAB treatments decreased. In addition, lactic acid bacterial counts in LAB inoculation significantly increased as compared to control ($p < 0.05$). Therefore, we suggest that rye silage could be improved by novel lactic acid inoculation.

Keywords: *Miscanthus sinensis*, Lactic acid bacteria, Silage, nutritive values

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