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ASSESSMENT OF THE EFFECTS OF CHEMICAL SILAGE ADDITIVES IN PRESSED PULP SILAGE

Evaluation des effets d'additives chimiques dans les ensilages de pulpe pressée / Untersuchungen zum Einsatz von chemischen Siliermitteln in Pressschnitzelsilagen

ABSTRACT

In the feeding of cattle large quantities of pressed pulp silage are used. However, several farms have problems with instable silages, essentially caused by management problems. Quality problems thereby manifest themselves often in excessive yeast contents that adversely affect the aerobic stability (ASTA) especially in summer feeding. The ASTA of pressed pulp silage - as with all moist energy rich silages - is relatively low and varies between one and five days with a target of minimum three days. An improvement of ASTA and thus a stabilization of pressed pulp silage is possible by optimizing the ensiling conditions or by the use of chemical silage additives.

In a practical experiment, the effect of three different chemical silage additives against an untreated control variant was tested. The silages were ensiled in plastic tubes and simultaneously opened in summer first time after a storage period of 188 days. Samples for determination of ASTA and microbiological parameters were taken at four sampling dates from fresh (after removal of 2 m silage) and 7 day old cut surface.

The mould content in all variants was low and not affected by the treatment. The average of the ASTA over the sampling period in the untreated control silage was 2.8 days and almost doubled by the chemical silage additives that also effectively reduced the yeast contents. However, the ASTA was reduced in all variants in the course of the experiment.

From the results it can be concluded that chemical silage additives can distinctly improve the aerobic stability of pressed pulp silage especially in summer. This effect can also be achieved by a sufficient feed rate (daily silage removal) and other management tools, in the context of "good silage management". But the use of chemical silage additives can ensure the silage quality and prevent problems.