WIFFR Silage Trial 2020.3 Whole Grain

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Aim of trial

To evaluate silage agent consisting of salts, THORSIL HAMMER, in freshly cut whole grain at intermediate dry matter contents. The additive is compared to untreated CONTROL and another additive based on acids (formic & propionic acid), as a positive control.

Abstract

The salt-based silage additive THORSIL HAMMER showed excellent results when ensiling whole grain at a dry matter of 34%. A negative CONTROL, untreated silage, and a positive control an ACID, based on formic and propionic acid, where used. HAMMER succeeded to lower the pH below 4, was stable during a 7-days aerobic stability stress period and had low weight losses. The CONTROL succeeded to lower the pH to almost 4 but was unable to withstand aerobic stress and heated after 44 hours. The first replicate of ACID (ACID1) lowered the pH to sufficient level, had the lowest weight loss, but heated already after 22 hours. A silage additive based on ACID that lowers the pH fast and leaves out the natural fermentation, may not be able to protect the silage if there is stress introduced, like air entrance. The last ACID additive (ACID2), showed early in the process an increased weight loss and performed worst of all replicates during the fermentation, was only capable to lower the pH to 4,86. The aerobic stability is usually not a factor as these silages are already spoiled.