

# Technical Bulletin

Arm & Hammer Animal and Food Production



## CERTILLUS Haylage inoculant to help improve fermentation.

### INTRODUCTION

CERTILLUS™ Haylage is an inoculant that includes scientifically selected lactic acid producing bacteria, formulated to drive an efficient fermentation to retain crop nutrients. The lactic acid bacteria in CERTILLUS Haylage ferment the sugars in alfalfa to produce lactic acid, a strong acid, which decreases the pH of the silage. The rapid decline in pH and lower final pH creates a less favorable environment for the growth of bacteria that negatively impact the fermentation and lower feed quality.

To observe the effectiveness of the CERTILLUS Haylage inoculant, alfalfa was packed in mini silos—one batch was treated with CERTILLUS Haylage and one batch served as a control (no treatment).<sup>1</sup> Fermentation was monitored over several weeks after ensiling.

### RESULTS

- The pH of the CERTILLUS Haylage inoculated alfalfa dropped more rapidly compared to the control and remained at a lower level during all sampling points (Fig. 1).
- An increased level of lactic acid was detected in the CERTILLUS Haylage inoculated alfalfa during fermentation (Fig. 2).

### SUMMARY

The results indicated that CERTILLUS Haylage had a more efficient fermentation, dropping the pH faster and maintaining a lower pH through increased production of lactic acid, which improves nutrient retention.

FIGURE 1: pH level.

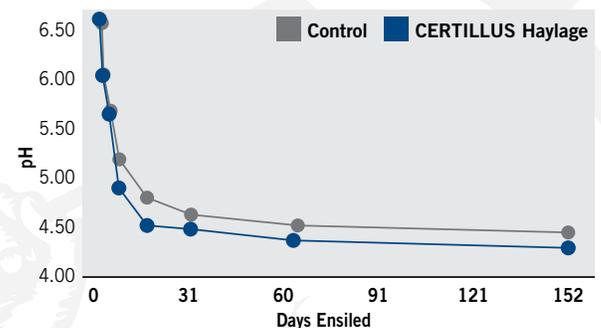
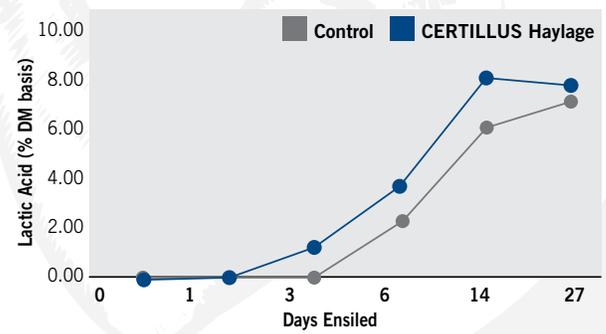


FIGURE 2: Lactic acid.



To learn more about CERTILLUS contact your nutritionist, veterinarian or ARM & HAMMER™ representative or visit [AHfoodchain.com](http://AHfoodchain.com).

<sup>1</sup> ARM & HAMMER Report, 2020. Data on file.