

## A Comparison of how Culbac<sup>®</sup> Silage Treatment stacks up against Live Inoculants

	Culbac Silage Treatment <sup>®</sup>	Live-microbial Inoculants
Dependability	Culbac <sup>®</sup> Silage Treatments work by stimulating beneficial bacteria that are native to the crop plant and are already adapted to localized conditions.	Live-microbial silage inoculants introduce strains that are often alien to a specific crop and the local environment, hindering their ability to survive much less match the performance of indigenous microflora.
Shelf-life	Since Culbac <sup>®</sup> Silage Treatments is an abiotic, it can't die or mutate during storage. This enables them to have a longer shelf life without the need for refrigeration or special storage conditions.	Live-microbial silage inoculants are only as good as long as the bacteria in them remain viable. This means they have a much shorter shelf life and require special storage conditions.
Application	Application rates for Culbac <sup>®</sup> Silage Treatment are low. Culbac <sup>®</sup> Silage Liquid should be applied at the rate of 1.3 fluid ounces per ton while Culbac <sup>®</sup> Silage Dry needs only 3.2 ounces per ton of silage.	Application rates for live-microbial silage inoculants can vary from only a few grams per ton up to a pound or more product per ton of silage.
Efficacy	Side-by-side research studies <sup>1</sup> have proven that Culbac <sup>®</sup> Silage Treatment helps produce a robust anaerobic fermentation that preserves silages as well and often better than live-microbial inoculants	Live-microbial inoculants can be effective at preserving silages under the right conditions of storage and usage.

And the winner is...Culbac<sup>®</sup> Silage Treatment! For reliable silage preservation, Culbac<sup>®</sup> Silage Treatments are an effective and economical alternative to live microbial inoculants.

**References:** <sup>1</sup> Leahy KT, Barth KM, Hunter PP and Howard DD (1985) Effect of Silage Additives on Total Dry Matter Loss and Heifer Performance, University of Tennessee (F13); -- (1983) Culbac<sup>®</sup> Compared with an Inoculant as a Silage Preservative, Mississippi (SL5).





Naturally Effective Solutions