

Pioneer® brand 11CFT

Corn Silage Inoculant



Pioneer® brand 11CFT is a revolutionary patented corn silage product designed to:

- Improve fiber digestibility
- Enable higher corn silage inclusion rates

Available as a water-soluble product in packaging suitable for use in tank mixes or with the Pioneer Appli-Pro® Application Systems.

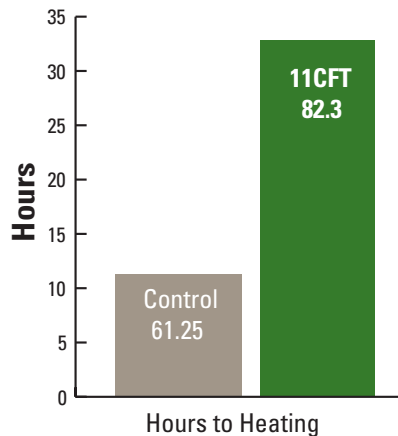
11CFT contains a novel strain of *Lactobacillus buchneri* which:

- Produces specific fiber-digesting enzymes as it replicates in silage
- Reduces shrink and improves bunklife of the silage face during feedout

In addition to fiber-digesting enzyme production, 11CFT contains a unique patented strain of *Lactobacillus casei* formulated to:

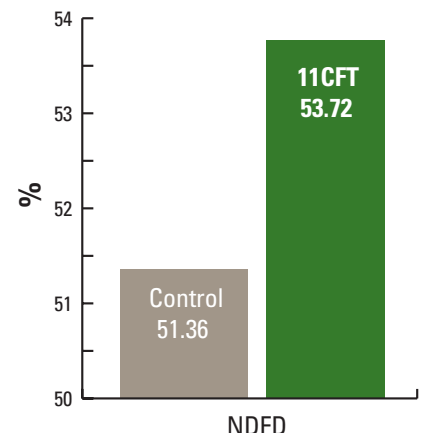
- Stimulate “front-end” fermentation efficiency by rapidly dropping pH, helping to retain valuable nutrients (sugar, starch)
- Establishes the ideal environment for growth and proliferation of the enzyme-producing *L. buchneri* allowing enzymatic activity to be expressed, “pre-digesting” NDF and making it more available to the rumen microbes

Improving aerobic stability resulting in less heating



Source: DuPont Pioneer Livestock Nutrition Center, Iowa

Animal research shows 11CFT is effective in improving NDF digestibility:



Source: University of Florida and the Lethbridge Research Center summarized third party *in situ* NDFD across four different hybrids.

11CFT showed an improvement in *in situ* NDF digestibility in four university studies (Univ of Florida, Univ of Delaware, Univ of Illinois and Lethbridge Research Center, Alberta, Canada). Complete trial data available upon request.

11CFT Ration Impact

Original ration balanced for 90 lbs milk/3.6% fat with cows fed 62.3 lbs corn silage (as fed basis). Modeled using CNCPS 6.1.36.0. Ration cost reduced by removing some soybean meal and corn grain while maintaining ME and MP predicted milk at original levels.

Reduced corn grain by 1.6 and SBM* by 1.0 lb	35.0¢/Cow/Day
62 lbs of CS treated with 11CFT cost	9¢/Cow/Day
Additional 6 lbs of 11CFT corn silage (as fed)	11¢/Cow/Day
Net Gain:	15¢/Cow/Day

* Soybean meal was valued at \$350/Ton and corn grain at \$6.00/bu

Additional value not included in calculations: reduced silage shrink in the bunker, higher forage diet for better rumen health and improved ration palatability.

11CFT received authorization in January, 2007 from the Canadian Food and Inspection Agency to make the following product claims:

- improved NDF digestibility
- improved feed efficiency
- reduced heating at feeding
- reduced dry matter loss at feeding
- improved beef gain/ton of silage fed and improved dry matter intake.

Available in Package Sizes:



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Improves Fermentation

Enhances Bunklife

Improves Fiber Digestibility

Relative Ratings * = Good; ** = Excellent; *** = Outstanding, NA = Not Applicable. IMPORTANT: Information and ratings are based on relative comparisons with other Pioneer® brand inoculants within each specific crop, not competitive products. Information and ratings are assigned by DuPont Pioneer Forage Additive Research, based on average performance across area of use under normal conditions, over a wide range of both environment and management conditions, and may not predict future results. Product responses are variable and subject to any number of environmental and management conditions. Please use this information as only part of your product positioning decision. Refer to www.pioneer.com/inoculants or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer® brand product. Fermentation – rate and extent of pH decline and the composition of fermentation acids occurring in silage. Bunklife – relative heat development compared to ambient temperature. Bunklife considers both how quickly silage begins to heat and the amount of heat generated while remaining above ambient temperature. Fiber Digestibility – the digestibility of neutral detergent fiber (NDF) by the ruminant animal expressed as a percentage of the total NDF.

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