



PIONEER® BRAND  
**INOCULANTS**

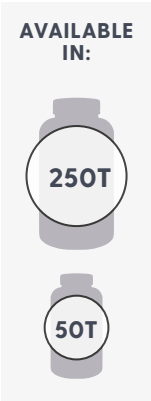
# 11CFT



## TECHNICAL FACT SHEET

**Pioneer® brand 11CFT is a revolutionary maize silage specific product, containing a novel strain of *Lactobacillus buchneri* and *Lactobacillus casei* which produces specific fibre digesting enzymes as it replicates in silage.**

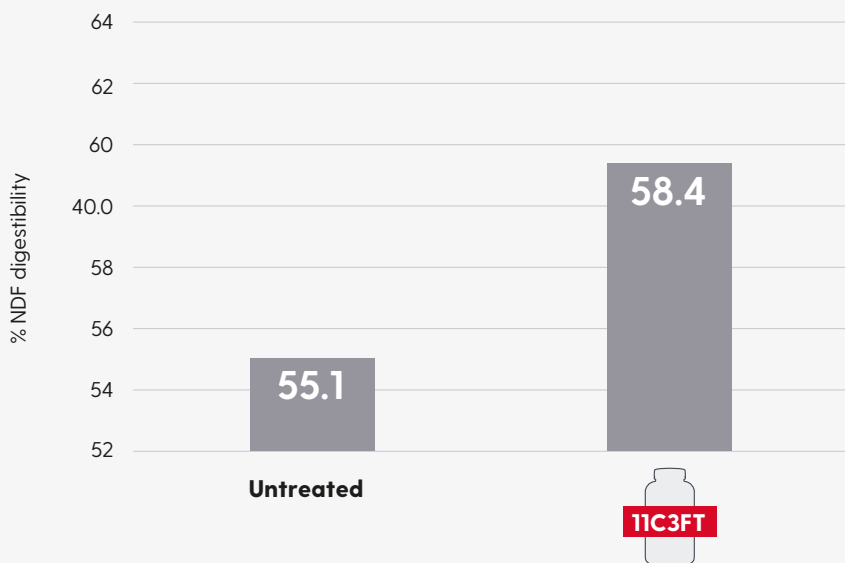
- Designed to improve fibre digestibility which enables higher inclusion rates of inoculated maize silage to be fed
- Stimulates “front-end” fermentation efficiency by rapidly dropping silage pH helping to retain valuable nutrients (sugar, starch)
- Establishes the ideal environment for growth and proliferation of the enzyme-producing *L. buchneri* allowing enzymatic activity to be expressed, “pre-digesting” NDF and making it more available to the rumen microbes
- Improves stability and bunklife from the production of unique silage volatile fatty acid profiles that inhibit yeast and aerobic bacterial populations
- Inoculant of choice for high producing farmers feeding high levels of maize silage



## IMPROVED NDF DIGESTIBILITY

An average of 5 in vivo digestion studies to evaluate the effects of 11CFT on fibre digestibility were conducted at the Pioneer Livestock Nutrition Center. 11CFT improved NDF digestibility by an average of 3.3%.

### Inoculant influence on NDF digestibility



**3.3%**  
improved NDF  
digestibility

Source: Pioneer Hi-Bred (2007), Pioneer 11CFT Technical Manual, p.19. Significance level P<0.05.

# HOW DOES CFT WORK?

Proprietary, novel *L. buchneri* bacteria produce enzymes (ferulate and acetyl esterases) which modify cell wall fibre (decoupling it from lignin) in the storage structure allowing more extensive fibre digestion when the silage is degraded by rumen bacteria.

