LIRA GOLD Slage Inoculants

Innovative Science Locks in Feedstuff Value and Maximizes Forage Quality



Sound silage making practices include selecting the right inoculant and applying it properly to ensure forage quality, consistency and palatability.

LIRA GOLD® Silage Treatment is scientifically formulated with 4 strains of homo-fermentative lactic-acid producing bacteria, 3 purified enzymes combined with an immediately available food source inside a protective capsule that breaks down quickly when applied to silage.

This delivers the following benefits for producing high quality silage:

- 1. The encapsulated food source immediately feeds bacteria to initiate rapid growth while awaiting access to natural sugars in the silage
- 2. Specific purified enzymes break down natural sugars in forage to further feed bacterial growth
- 3. The four bacterial strains were selected for their ability to quickly produce high levels of lactic acid

End result:

- 1. Silage Inoculant drives pH down below 4 within 24-48 hours
- 2. Enzyme activity stops around 4.5 pH to avoid abnormal forage breakdown
- 3. Forage quality is locked in at a close to "in the field" level for delivering maximum fed value



LIRA GOLD Silage Inoculants

A Stabilized And Concentrated Encapsulated Silage Inoculant Containing Lactic Acid Producing Bacteria, Purified Enzymes And An Immediately Available Food Source Designed To Aid Fermentation In A Broad Range Of Forages, Including Corn, Alfalfa, Grass Hays And High Moisture Grains

Putting up forage is serious business! Locking in forage quality quickly helps ensure maximum value delivered as fed. **LIRA GOLD Silage Inoculant's** encapsulated formula is designed to immediately feed bacterial growth while awaiting enzyme driven access to natural sugars in the forage. Once natural sugars further accelerate growth, the fermentation process results in high levels of lactic acid that is proven to drive pH down below 4.0 within 24-48 hours.

Enzyme activity is required to fuel bacterial growth. However, if enzyme activity continues, unwanted breakdown of the forage may occur. The selected enzymes in Silage Inoculant are no longer active under 4.5 pH, further helping to ensure maximum forage quality and consistency.

LIRA GOLD Silage Inoculant uses a "team" approach to fermenting crops. The encapsulated bacteria strains, purified enzymes and enclosed food source work in a step-wise fashion to quickly and efficiently drive proper fermentation of your forages. Including forages with a low carbohydrate/sugar content.

Pediococcus pentosaceus — the fast start bacteria.

Enterococcus faecium — first to produce lactic acid.

Lactobacillus strains (2) - key "finisher" bacteria, active to pH < 4.0.

Bacillus subtilis — competes with yeast and mold, uses oxygen to enhance growth of lactic acid producing bacteria.

Purified digestive enzymes — amylase, cellulase, xylanase - break down plant constituents and liberates sugars that fuel bacterial growth to aid the speed and completeness of fermentation.



Guaranteed Analysis:

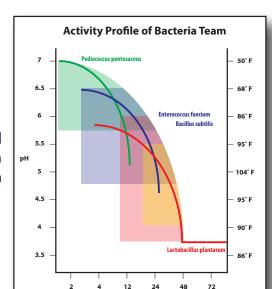
Total Bacteria Count	30 Billion Colony Forming Units/g
α-Amylase (Aspergillus oryzae)	54 µg starch hydrolyzed/minute/g
Cellulase (Aspergillus oryzae)	20 µg cellulose broken down/min/g
Xylanase (Aspergillus oryzae)	30 μg xylans hydrolyzed/min/g

Application rate:

Each LIRA GOLD Silage Inoculant package is formulated to treat the listed number of tons of silage on the label. Please follow label directions on each package for mixing and delivering the proper application rates for each forage type or contact your LIRA GOLD representative for assistance.

Available in the following sizes and applications:

- LIRA GOLD 50 Ton WS Inoculant, 8 oz foil pack
- LIRA GOLD 100 Ton WS Inoculant, 1 lb foil pack
- LIRA GOLD 250 Ton WS Inoculant, 1g/1t
- LIRA GOLD 500 Ton WS Inoculant, 1g/1t
- LIRA GOLD Dry Silage Inoculant, 50 lb bag
- LIRA GOLD 100 Ton WS Organic Inoculant, 1 lb foil pack
- LIRA GOLD Dry Organic Silage Inoculant, 50 lb bag



Hours Post Ensiling

Alpha Amylase - active 7-5 pH Xylanase - active 6.5-4 pH

Cellulase - active 5.5-4 pH

