MAGNIVA® PLATINUM

INCREASES PROFITABILITY THROUGH IMPROVED DRY MATTER RECOVERY, NUTRIENT RETENTION AND AEROBIC STABILITY AFTER 15 DAYS OF ENSILING

DRIVE FERMENTATION	ENHANCE FEED DIGESTIBILITY	IMPROVE FEEDOUT STABILITY	GAIN FEEDOUT FLEXIBILITY
+ + + + +	+ + + + +	+ + + + +	+ + + + +

MAGNIVA® Platinum combines three strains of elite lactic acid bacteria with high activity enzymes to lower pH, reducing dry matter losses and improving nutrient retention for enhanced feedout value. MAGNIVA Platinum combines the patented *Lentilactobacillus hilgardii* CNCM I-4785 with research-backed *Lactobacillus buchneri* NCIMB 40788 to achieve aerobically stable silage in 15 days.

USED FOR

- Silages to be fed as soon as 15 days of storage
- High-moisture corn (HMC), earlage, snaplage
- Silages to be fed during warm temperatures
- Crops exposed to challenging field conditions that can lead to yeast and mold growth
- Haylages over 35% dry-matter (DM) and baleages
- Corn silage above 32% DM
- Ensiled crops that will be transported or relocated

STRAINS	MAIN FEATURES	COLONY FORMING UNITS (CFU)
Pediococcus pentosaceus NCIMB 12455	Drives the initial fermentation, ensuring good acidification and well-preserved silage with maximum feed value.	100,000 CFU/g fresh forage 150,000 CFU/g HMC
L. hilgardii CNCM I-4785 *L. buchneri* NCIMB 40788	In combination, *L. hilgardii* CNCM I-4785 and *L. buchneri* NCIMB 40788 improve aerobic stability after just 15 days fermentation – especially useful when feed stocks are in short supply – and significantly increase longer term stability. This unique combination reduces yeast and mold spoilage and dry matter losses.	Each at: 150,000 CFU/g fresh forage 225,000 CFU/g HMC

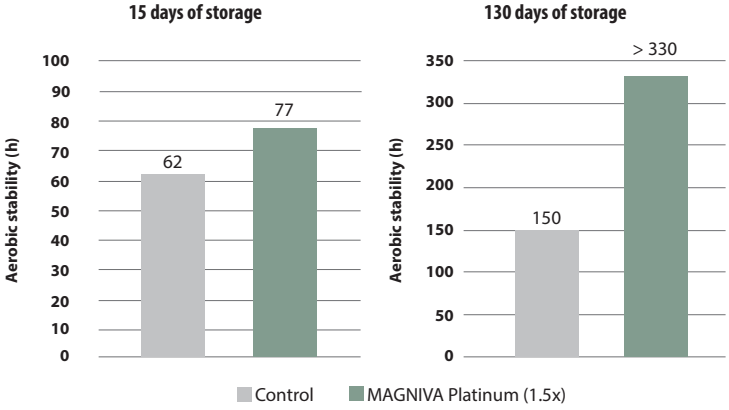
ENZYMES	MAIN FEATURES	ACTIVITY
ß-glucanase (EC 3.2.1.6)	Release sugars from the forage, ensuring a quick fermentation. Helps increase silage digestibility.	1,335 units per gram
xylanase (EC 3.2.1.8)		3,736 units per gram

one unit = one mg sugar released/minute

PROVEN RESULTS

IMPROVES AEROBIC STABILITY

In a study at the University of Delaware, HMC treated with MAGNIVA Platinum (at the recommended rate, 1.5x) was significantly more aerobically stable at 15 and 130 days compared to the control.[1]



IMPROVED FEED EFFICIENCY

In a feeding study at Lethbridge Research and Development Centre, cattle fed corn silage treated with *L. hilgardii* CNCM I-4785 and *L. buchneri* NCIMB 40788 trended to improved feed efficiency compared to cattle fed the control diet containing untreated silage. [3]

ITEM	CON[1]	INOC[1]	SEM[2]	*P*-Value
Number of steers	20	20	-	-
ADG, kg d $^{-1}$	1.48	1.52	0.053	0.56
DMI, kg	10.1	9.6	0.20	0.15
DMI as % BW	2.34	2.24	0.034	0.04
ADG:DMI	0.147	0.159	0.0044	0.07
NEm[4] , Mcal kg^{-1} DM	1.81	1.92	0.032	0.03
NEg[4] , Mcal kg^{-1} DM	1.18	1.27	0.028	0.03

[1] CON, uninoculated control silage; INOC, corn silage inoculated with lactic acid bacterial (LAB) inoculant containing 1.5×10^5 cfu g -1 fresh forage *L. buchneri* and 1.5×10^5 cfu g -1 fresh forage *L. hilgardii*. [2] SEM, pooled standard error of mean, n = 20 steers per treatment.

IMPROVED FERMENTATIVE AND HYGIENIC PROFILES

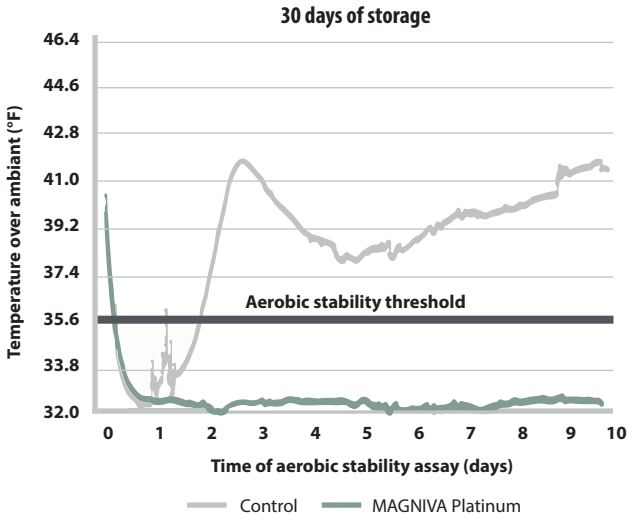
In a commercial trial on grass silage, treating with MAGNIVA Platinum significantly reduced numbers of yeast, clostridial spores and ethanol levels, resulting in a cleaner, more stable and palatable silage after 58 days.[2]

ITEM PARAMETER (% DM unless stated)	CONTROL	MAGNIVA Platinum	*P*-Value
pH	4.16	3.92	0.04
Lactic Acid	7.72	7.74	NS
Acetic Acid	1.68	2.90	NS
Ethanol	1.08	0.48	0.009
1,2-Propanediol	1.28	3.44	0.008
Yeasts (CFU/g)*	3.16E+06	3.98E+04	0.03
Spores of *C. tyrobutyricum* (CFU/g)*	1.26E+03	ND	0.009

*Colony forming unit

IMPROVED AEROBIC STABILITY

MAGNIVA Platinum treated corn silage was consistently more aerobically stable at 30 days of ensiling compared to the control at a trial at the Lallemand Animal Nutrition Forage Center of Excellence in Chazy, NY. [4]



OUR GUARANTEE: WHAT IS ON THE LABEL IS INSIDE THE PACKAGE!

MAGNIVA Platinum Available Sizes

182 g pouch of water-soluble concentrate treats 100 tons of fresh forage or 66 tons (approximately 1,953 bushels) of HMC
907 g pouch of water-soluble concentrate treats 500 tons of fresh forage or 333 tons (approximately 9,852 bushels) of HMC

Contact your Lallemand Animal Nutrition sales representative.

Always follow label directions: The use of any forage additive cannot be expected to overcome poor management. Proper storage and handling is important to forage inoculant performance. Store product in a cool, dry place and the whole package should be used at one time. Visit www.MAGNIVA.com for the latest information on silage management practices.

REFERENCES: TRIAL SUMMARIES AVAILABLE UPON REQUEST

[1] Limin Kung, Jr., Erica Benjamim da Silva and Xiaojing Liu, (2020) Dairy Nutrition & Silage Fermentation Lab; University of Delaware; Newark, Delaware 19716 (MVNAE042) [2] Lallemand Animal Nutrition, Southwest France, 2020. (MVNAE044)
[3] Yuxi Wang, JK Nair and Tim McAllister (2018) Lethbridge Research and Development Centre, AAFC (MVNAE045) [4] Lallemand Animal Nutrition - Center of Excellence (Chazy, NY, USA) (2018/2019) (MVNAE043)

MVUSE032
V160323

LALLEMAND ANIMAL NUTRITION ■ SPECIFIC FOR YOUR SUCCESS
www.lallemandanimalnutrition.com