

# Capacity Charts

## As-fed upright silo capacity

| Size, ft<br>(diameter<br>x height) | Corn silage & haylage |       |       | HMSC  | Ground<br>HMSC | Ground<br>HM ear<br>corn |
|------------------------------------|-----------------------|-------|-------|-------|----------------|--------------------------|
| Moisture<br>content                | 70%                   | 60%   | 50%   | 30%   | 30%            | 30%                      |
| 12x30                              | 80                    | 65    | 50    | 89    | 95             | 70                       |
| 12x40                              | 115                   | 90    | 70    | 120   | 128            | 94                       |
| 12x50                              | 155                   | 120   | 95    | 151   | 160            | 120                      |
| 14x40                              | 160                   | 120   | 96    | 165   | 172            | 128                      |
| 14x50                              | 213                   | 160   | 127   | 208   | 220            | 163                      |
| 14x60                              | 266                   | 200   | 160   | 251   | 264            | 198                      |
| 16x30                              | 146                   | 110   | 88    | 150   | 166            | 123                      |
| 16x40                              | 209                   | 156   | 125   | 220   | 224            | 167                      |
| 16x50                              | 278                   | 208   | 167   | 274   | 285            | 213                      |
| 16x60                              | 347                   | 260   | 208   | 330   | 345            | 259                      |
| 18x40                              | 265                   | 198   | 159   | 270   | 284            | 211                      |
| 18x50                              | 352                   | 264   | 211   | 350   | 360            | 269                      |
| 18x60                              | 440                   | 330   | 264   | 422   | 437            | 328                      |
| 18x70                              | 530                   | 398   | 318   | 496   | 520            | 389                      |
| 20x40                              | 326                   | 245   | 196   | 340   | 350            | 260                      |
| 20x50                              | 435                   | 326   | 261   | 428   | 445            | 332                      |
| 20x60                              | 543                   | 407   | 326   | 525   | 540            | 404                      |
| 20x70                              | 655                   | 491   | 393   | 617   | 638            | 480                      |
| 20x80                              | 767                   | 575   | 460   | 708   | 736            | 557                      |
| 24x50                              | 626                   | 470   | 375   | 600   | 640            | 478                      |
| 24x60                              | 782                   | 587   | 469   | 763   | 776            | 582                      |
| 24x70                              | 943                   | 707   | 565   | 897   | 918            | 692                      |
| 24x80                              | 1,104                 | 828   | 662   | 1,032 | 1,060          | 801                      |
| 24x90                              | 1,275                 | 955   | 764   | 1,165 | 1,209          | 920                      |
| 30x80                              | 1,725                 | 1,293 | 1,035 | 1,628 | 1,656          | 1,252                    |
| 30x90                              | 1,990                 | 1,493 | 1,195 | 1,840 | 1,888          | 1,434                    |

## Wagon capacity

| Depth, ft | Approximate tons (as-is basis) |      |      |      |                           |     |     |      |
|-----------|--------------------------------|------|------|------|---------------------------|-----|-----|------|
|           | Length, ft (65% moisture)      |      |      |      | Length, ft (55% moisture) |     |     |      |
|           | 14                             | 16   | 18   | 20   | 14                        | 16  | 18  | 20   |
| 3         | 3.5                            | 4.0  | 4.5  | 5.0  | 2.5                       | 3.0 | 3.5 | 4.0  |
| 4         | 4.5                            | 5.5  | 6.0  | 6.5  | 3.5                       | 4.0 | 4.5 | 5.0  |
| 5         | 6.0                            | 6.5  | 7.5  | 8.5  | 4.5                       | 5.0 | 5.5 | 6.5  |
| 6         | 7.0                            | 8.0  | 9.0  | 10.0 | 5.5                       | 6.0 | 7.0 | 7.5  |
| 7         | 8.0                            | 9.5  | 10.5 | 12.0 | 6.0                       | 7.0 | 8.0 | 9.0  |
| 8         | 9.5                            | 11.0 | 12.0 | 13.5 | 7.0                       | 8.0 | 9.0 | 10.0 |

## Bag capacity\*

| Bag size, ft | Tons (fresh) |
|--------------|--------------|
| 8            | 1            |
| 9            | 1.25         |
| 10           | 1.5          |
| 11           | 1.75         |
| 12           | 2.25         |
| 14           | 2.75         |

\*Estimates shown are for corn silage.

## Ratio for bag chart

| Type of crop, moisture | Relation to 65% corn<br>silage tonnage |
|------------------------|--|
| Haylage, 60%           | 100%                                   |
| HMSC, 30%              | 130%                                   |
| Earlage, 35%           | 120%                                   |
| Snapple, 40%           | 130%                                   |

## Estimated as-fed capacity for bunkers and piles

|                         |          |                                    |
|-------------------------|----------|------------------------------------|
| Enter avg<br>width*     | 1. _____ | ft                                 |
| Enter avg<br>length     | 2. _____ | ft                                 |
| Enter avg<br>height     | 3. _____ | ft                                 |
| Multiply<br>1x2x3       | 4. _____ | lb/ft <sup>3</sup> in<br>structure |
| Est as-fed<br>density** | 5. _____ | lb/ft <sup>3</sup>                 |
| Multiply<br>4x5         | 6. _____ | lb<br>as-fed in<br>structure       |
| Divide by<br>2,000      | 7. _____ | tons<br>as-fed in<br>structure     |

\*To determine dimensions for piles, look at the slopes of each side of the pile. Visualize how much of the slope would need to be "folded back" on itself to square up the sides of the pile to determine average width.

\*\*Use known as-fed density when possible. Otherwise, start with these average densities: 40 lb for haylage and corn silage; 60 lb for HMSC; and 45 lb for earlage/snapple. Use higher or lower numbers for well packed or poorly packed units, respectively.



**Vita Plus Corporation**  
PO Box 259126, Madison, WI 53725-9126  
800.362.8334 • [www.vitaplus.com](http://www.vitaplus.com)

REV 1122

# CROP-N-RICH<sup>®</sup> MTD/1<sup>®</sup>

Easy-to-use silage inoculant  
for greater dry matter  
recovery in a broad range of  
forages & conditions

Contains *L. plantarum* MTD/1



Service & technology to get  
the most from your forage  
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# CROP-N-RICH® MTD/1®

Silage inoculant with *L. plantarum* MTD/1 bacteria provides a more efficient fermentation for greater dry matter (DM) recovery

## Proven effective

### Backed by more than 200 research trials showing:

- Improved fermentation profile
- 2.7% improvement in DM recovery of corn silage and 4.1% improvement in haylage
- Average 3% improvement in digestibility
- 2.5-lb-per-cow increase in milk production
- Better protein quality retention, fewer biogenic amines, improved protein digestion and retention in rumen, and lower MUN

### Pure, effective bacterial inoculant:

- Supplies 100,000 colony-forming units (CFU) per gram of pure lactic acid-producing *L. plantarum* MTD/1 bacteria
- Fast-growing bacteria double within minutes of application

## Unmatched ease of use

- Water-soluble products easily mix into solution in less than 45 seconds
- Same product can be used on all forages and high moisture grains at the same application rate
- Works at a wide pH range of 3.5 to 7.5
- Active under high and low DM conditions
- Best tank viability and temperature tolerance available
- No refrigeration or special handling required

## Product Options

### Water-soluble products

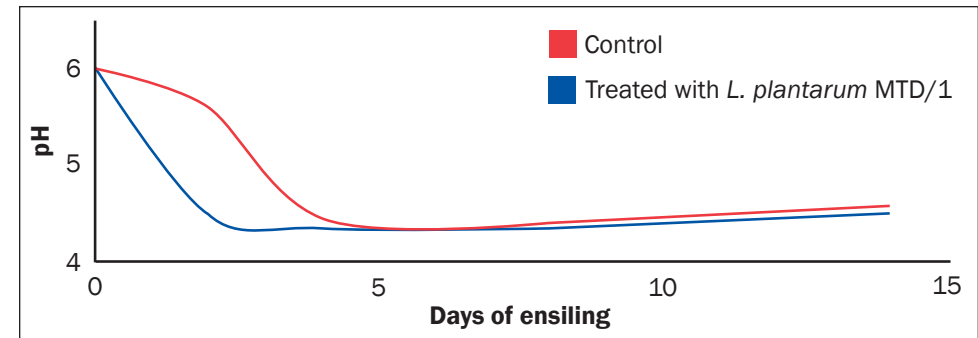
- **Crop-N-Rich MTD/1 1000** (treats 1,000 tons)
- **Crop-N-Rich MTD/1 500** (treats 500 tons)
- **Crop-N-Rich MTD/1 100** (treats 100 tons)

### Dry product

- **Crop-N-Rich G** (treats 50 tons)



### Fast pH drop when inoculating with *L. plantarum* MTD/1 (DM <35%).



Source: Whiter and Kung, 2001, Journal of Dairy Science

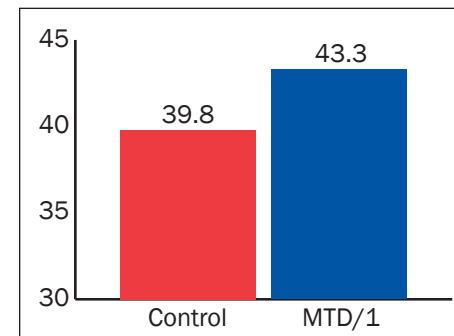
### Average production results from 15 independent dairy cow trials with Crop-N-Rich inoculant with MTD/1.

|                        | Untreated | MTD/1 |
|------------------------|-----------|-------|
| Silage DM intake, lb/d | 23.6      | 24.6  |
| Milk yield, lb/d       | 57.9      | 60.4* |
| Milk fat, lb/d         | 2.18      | 2.30* |
| Milk protein, lb/d     | 1.80      | 1.87* |
| Milk lactose, lb/d     | 2.52      | 2.50* |

\*Statistically significant difference

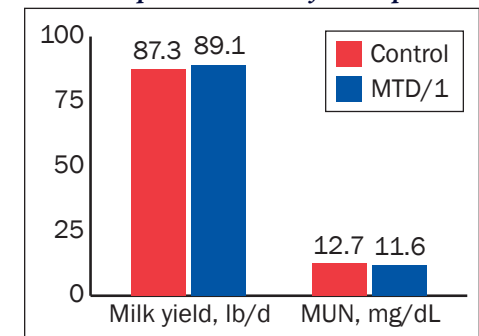
Trials conducted at university and government research institutes in the U.S., Canada, UK, Eire, Holland, Germany, and Japan

### More milk and lower MUN.



Source: Muck, USDA Forage Research Center

### More true protein as a % of crude protein.



Source: Muck, USDA Forage Research Center