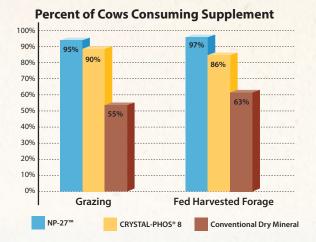
## Advantages to a CRYSTALYX® Mineral Pasture Program.



Mineral, vitamin and trace mineral antagonist levels contained in pasture grasses will vary greatly by season, maturity and pasture location. As grasses advance to maturity, phosphorus and

calcium levels decrease rapidly. Hot, dry weather further diminishes pasture nutrient values. For these reasons, feeding CRYSTALYX® Mineral Supplements is important to ensure cattle receive ideal levels of nutrients they need for optimum health and performance.

#### **Compare the Benefits and Save!**



When providing a mineral supplement along with protein, it has been found that a high percentage of the cows will choose low-moisture blocks.

"Comparison of Low-Moisture Molasses Blocks and Loose Dry Mineral Mixes as Delivery Systems for Supplementing Trace Minerals to Rangeland Cattle." Bailey, D.W. and G.R. Welling. 2002. Abstr., Ann. Mtg. Soc. Range Manage. Kansas City, MO, Feb., 2002.

# **Technology** for Improved Health and Performance



Added **BIOPLEX**® organic trace minerals are easily absorbed and readily metabolized.

- Supported by more than 21 years of research
- Provides mineral nutrition in a the same form found in plants
- Easily absorbed, readily metabolized
- Excellent sources of essential copper, manganese, zinc and cobalt
- Greater bioavailability than inorganic minerals



Added **BIO-MOS**® promotes gut health.

BIO-MOS® is derived from a specific strain of yeast and helps promote animal performance.

#### **BIO-MOS® Supports:**

- Colostrum quality
- New calf performance
- Efficient nutrient transfer from cow to calf
- Gastrointestinal integrity and stability (gut health)



Added **ACTIGEN**® promotes performance naturally.

A cost effective, safe and traceable technology that helps animals to thrive and reach their genetic potential.

#### **ACTIGEN® Supports:**

- Gut health
- Efficient nutrient utilization



Added **FEB-200<sup>™</sup>** to protect herd health and performance when grazing tall fescue.

- 15+ years of research to support herd health and performance
- Low inclusion rate to ensure cattle maximize their true potential while optimizing profitability



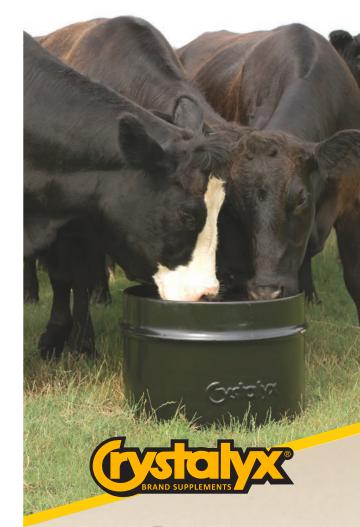
Ask for CRYSTALYX® Supplements at your local dealer:





Mankato, MN 56001 1.800.727.2502 Crystalyx.com

W90162 09/17



# Mineral Programs

Nutrient dense, self-fed supplements now with Alltech® technology for better performance.









#### **MINERALS**

| Most Low-More                | PREMIUM LineUp                                     | BALANCED LineUp                           |  |  | <b>ECONOMY</b> <i>LineUp</i> |
|------------------------------|--|---|--|--|------------------------------|
| TYPICAL NUTRIENT ANALYSIS    | BREED <sup>UP</sup> MAX                            | Cystal-Phos 4                             | Crystal-Phos 8                                     | Fescue-Phos®                                       | Mineral-lyx®                 |
| Crude Protein, min           | _  | _   | _  | _  | 4.0%                         |
| Crude Fat, min               | 3.0%   | 3.0%                                      | 3.0%   | 3.0%   | 3.0%                         |
| Calcium (Ca), min            | 6.0%   | 8.5%                                      | 7.0%   | 5.0%   | 3.5%                         |
| Calcium (Ca), max            | 7.0%   | 10.0%                                     | 8.0%   | 6.0%   | 4.5%                         |
| Phosphorus (P), min          | 6.0%   | 4.0%                                      | 8.0%   | 5.0%   | 4.0%                         |
| Salt (NaCl)                  | None Added   | None Added                                | None Added   | None Added   | None Added                   |
| Magnesium (Mg), min          | 3.5%   | 2.5%                                      | 2.5%   | 5.0%   | 3.0%                         |
| Cobalt (Co), min             | 65 ppm   | 30 ppm                                    | 30 ppm   | 20 ppm   | 5 ppm                        |
| Copper (Cu), min             | 2,000 ppm  | 1,000 ppm                                 | 1,000 ppm  | 2,000 ppm  | 500 ppm                      |
| Iodine (I), min              | 100 ppm  | 50 ppm                                    | 50 ppm   | 50 ppm   | 25 ppm                       |
| Manganese (Mn), min          | 8,000 ppm  | 4,000 ppm                                 | 4,000 ppm  | 4,000 ppm  | 2,000 ppm                    |
| Selenium (Se), min           | 13.2 ppm   | 13.2 ppm                                  | 13.2 ppm   | 13.2 ppm   | 8.8 ppm                      |
| Zinc (Zn), min               | 6,000 ppm  | 3,000 ppm                                 | 3,000 ppm  | 6,000 ppm  | 1,500 ppm                    |
| Vitamin A, min               | 300,000 IU/lb                                      | 100,000 IU/lb                             | 200,000 IU/lb                                      | 200,000 IU/lb                                      | 100,000 IU/lb                |
| Vitamin D <sub>3</sub> , min | 30,000 IU/lb                                       | 10,000 IU/lb                              | 20,000 IU/lb                                       | 40,000 IU/lb                                       | 10,000 IU/lb                 |
| Vitamin E, min               | 1,000 IU/lb  | 100 IU/lb                                 | 200 IU/lb  | 200 IU/lb  | 100 IU/lb                    |
|                              | Contains<br>BIOPLEX*<br>organic trace<br>minerals. | Contains BIOPLEX* organic trace minerals. | Contains<br>BIOPLEX°<br>organic trace<br>minerals. | Contains<br>BIOPLEX*<br>organic trace<br>minerals. |                              |
| ACTIGEN® OPTION              |  |   |  |  |                              |
| BIO-MOS® OPTION              |  |   |  |  | <b>—</b>                     |
| FEB-200™ OPTION              |  |   |  |  |                              |

## **BREED** MAX

Nutrient dense, self-fed mineral supplement. Ideal for overcoming nutritional stress associated with calving and the breeding period.

#### (rystal-Phos 4

Self-fed mineral supplement designed to compliment the mineral composition of grass or legume forages.

#### (rystal-Phos 8

Ideal stand-alone mineral with supplemental macro minerals, organic trace minerals and vitamins. Can be used year-round.

#### Fescue-Phos®

Stand-alone mineral supplement containing Tasco®, a seaweed meal that research suggests improves fiber and organic matter digestibility. Helps reduce the effects of heat stress and fescue toxicosis.

## **Mineral-lyx**®

All-season mineral supplement for grazing cattle. Designed to complement the mineral composition of grass or legume forages.



### FLY CONTROL

| TYPICAL NUTRIENT<br>ANALYSIS | IGR <b>MAX</b> ™                                   | ROLYX  | Mineral-lyx® with ClariFly |  |
|------------------------------|--|--|----------------------------|--|
| Crude Protein, min           | _  | _  | 4.0%                       |  |
| Crude Fat, min               | 3.0%   | 3.0%   | 3.0%                       |  |
| Calcium (Ca), min            | 5.0%   | 5.0%   | 3.5%                       |  |
| Calcium (Ca), max            | 6.0%   | 6.0%   | 4.5%                       |  |
| Phosphorus (P), min          | 5.0%   | 5.0%   | 4.0%                       |  |
| Salt (NaCl)                  | None Added   | None Added   | None Added                 |  |
| Magnesium (Mg), min          | 5.0%   | 5.0%   | 3.0%                       |  |
| Cobalt (Co), min             | 30 ppm   | 30 ppm   | 5 ppm                      |  |
| Copper (Cu), min             | 1,000 ppm  | 1,000 ppm  | 500 ppm                    |  |
| Iodine (I), min              | 50 ppm   | 50 ppm   | 25 ppm                     |  |
| Manganese (Mn), min          | 4,000 ppm  | 4,000 ppm  | 2,000 ppm                  |  |
| Selenium (Se), min           | 13.2 ppm   | 13.2 ppm   | 8.8 ppm                    |  |
| Zinc (Zn), min               | 3,000 ppm  | 3,000 ppm  | 1,500 ppm                  |  |
| Vitamin A, min               | 200,000 IU/lb                                      | 200,000 IU/lb                                      | 100,000 IU/lb              |  |
| Vitamin D <sub>3</sub> , min | 20,000 IU/lb                                       | 20,000 IU/lb                                       | 10,000 IU/lb               |  |
| Vitamin E, min               | 200 IU/lb  | 200 IU/lb  | 100 IU/lb                  |  |
|                              | Contains<br>BIOPLEX°<br>organic trace<br>minerals. | Contains<br>BIOPLEX°<br>organic trace<br>minerals. |                            |  |
| Prevents HOUSE FLIES         |  | <b>V</b> ,   | <b>V</b> ,                 |  |
| Prevents HORN FLIES          | <b>V</b>   | <b>V</b> ,   | <b>V</b> ,                 |  |
| Prevents FACE FLIES          |  | <b>V</b>   | <b>V</b>                   |  |
| Prevents STABLE FLIES        |  | <b>V</b>   | <b>V</b>                   |  |

#### IGR MAX

Mineral supplement to help prevent adult horn fly emergence from manure of treated cattle. Contains Altosid® Insect Growth Regulator for continuous feeding to cattle through the horn fly season.



Mineral supplement containing Rabon® Oral Larvicide. Supplemental mineral and fly protection for cattle and horses on pasture.



Prevents the emergence of house flies, horn flies, face flies and stable flies from manure of treated cattle. Prevents the emergence of house fles and stable flies from manure of treated horses.



Altosid® and ClariFly® are registered trademarks of Welmark International. Rabon® is a registered trademark of Bayer Animal Health.