



A BIOLOGICAL FARM MANAGEMENT SYSTEM (BFMS™) GUIDE FOR: Forage Crops

SPRING SOIL PREPARATION WITH BIOLOGICALS:

If soil preparation for spring planting is done in the spring, apply one (1) pound of **BioGENESIS I™** and 12.5 oz.. **PEPZYME G™** per surface acre.

FALL SOIL PREPARATION (OR BUDGET PLAN) WITH BIOLOGICALS:

If soil preparation for spring planting is done in the fall, you can save money by applying 50 grams of **SPECTRUM™** and 12.5 oz. of **PEPZYME G™** per surface acre. Immediate incorporation is necessary to protect **SPECTRUM™** microbes from UV damage. For best first year results with **SPECTRUM™**, fall application is recommended to give the microbes more time to establish before planting.

SOIL TREATMENT FOR PLANTED FIELD:

Broadcast spray with **BioGENESIS I™** or **SPECTRUM™** and **PEPZYME G™**.

SEED TREATMENT:

Treat seeds with **BioGENESIS III SDG™** before planting.

FOLIAR TREATMENTS:

Apply **PZ 1000™** foliar fertilizer at a rate of 2.66 oz. to 5.50 oz. per acre as soon as true leaves emerge. Repeat one or two times during the growing season (**MICRO 5000™** or **MICRO 5000 ORGANIC™** may also be used instead of, or alternating with **PZ 1000™**).

FOR BEST RESULTS:

- Apply foliars in early morning or evening when temperature is below 80° F.
- Do not combine microbial products with antibiotics or materials that contain chlorides, bromine, fluorine, or elemental copper. Use in separate applications at least two days apart.
- Premix products before adding to tank if agitation systems are not mechanical.
- This protocol is intended as support for your fertility program and not as a replacement. It is designed for simplicity and compatibility with almost any fertility program. Our specific recommendations to you may vary depending on your own unique situation.

FOR ORGANIC APPLICATIONS, PLEASE SUBSTITUTE THE FOLLOWING:

BioGENESIS I NP™ for **BioGENESIS I™**

PEPZYME CLEAR™ for **PEPZYME G™**

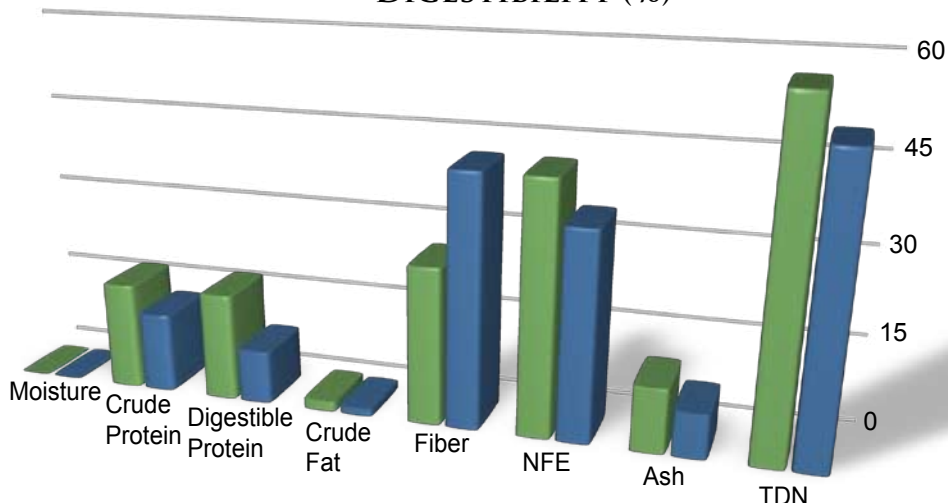
MICRO 5000 ORGANIC™ for **MICRO 5000™** and **PZ 1000™**

BFMS™ PROGRAM RESULTS

ALFALFA FEED STUDY

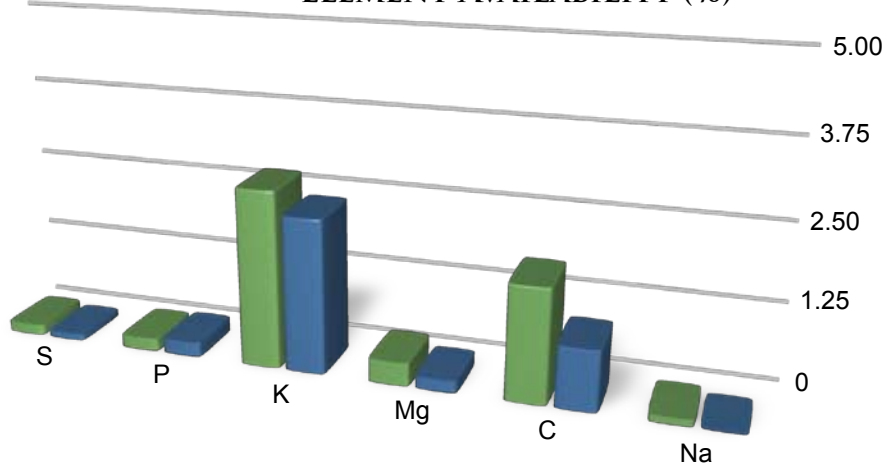


DIGESTIBILITY (%)



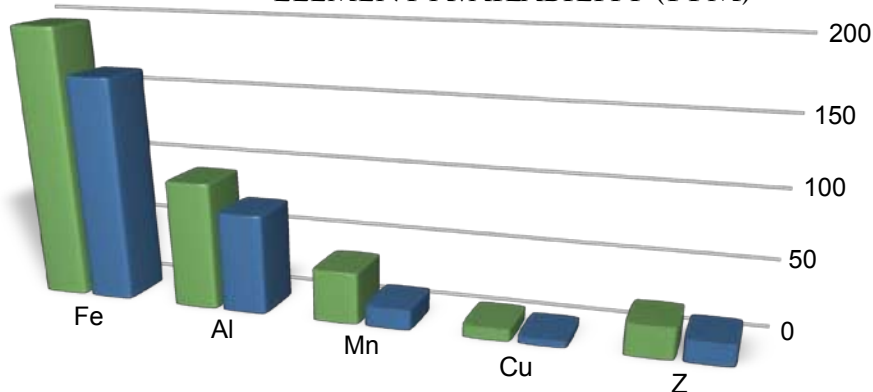
BFMS
The BFMS portion received only one application of Pepzyme G™ and two applications of PZ 1000™.

ELEMENT AVAILABILITY (%)



Control
The conventionally grown alfalfa was fertilized with 20# of Nitrogen 40# of Phosphorus, and 3# of Sulfur.

ELEMENT AVAILABILITY (PPM)



Amino Acid Profile		
	BFMS	Control
Aspartic Acid	2.54%	2.04%
Threonine	0.63%	0.35%
Serine	0.68%	0.63%
Glutamic Acid	1.43%	0.87%
Proline	1.60%	0.93%
Glycine	0.73%	0.45%
Alanine	0.76%	0.47%
Valine	0.80%	0.53%
Isoleucine	0.77%	0.44%
Leucine	1.30%	0.75%
Tyrosine	0.35%	0.22%
Phenylalanine	0.69%	0.4%
Lysine	0.74%	0.74%
Histidine	0.33%	0.22%
Arginine	0.51%	0.28%