

## **Product Catalogue**











# OCEANFEED<sup>™</sup> DRIED SEAWEED MEAL BASE BLEND

## Why Choose OceanFeed<sup>™</sup> DRIED SEAWEED MEAL?

Bio-Ag's Dried Seaweed Meal blend was specifically selected because of the bioactive properties the seaweed contains. Bioactive compounds are a large group of compounds that can have a positive effect on the health and well-being of a living organism, tissue or cell. The properties of these compounds include antioxidants, polysaccharides, amino acids, pigments, flavonoids, long-chain fatty acids, and water-soluble proteins. Bioactive compounds are the strength of our blend, and lead to increased nutrient availability.

✓ When a small amount of **Dried Seaweed Meal** is included in the diet, it supports gut health and promotes nutrient absorption, thus improving your animal's overall health.

**Dried Seaweed Meal** is a rich source of B-vitamins and minerals which compliment your premix program.

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## www.bio-ag.com

## What Does Bio-Ag Do?

Bio-Ag is a family-owned agricultural manufacturing and distributing company. Bio-Ag develops and distributes agricultural products and services that cooperate with nature's biological systems.

Bio-Ag enables farmers to grow their profits and produce quality food by strengthening the biological system on their farms. Bio-Ag supplies farmers with well-researched information and products that improve and maintain the health of their livestock, crops, and soil. All Bio-Ag products are selected for distribution based on their efficiency, ecological soundness and economic value. Bio-Ag strives to use GMO-free ingredients, and all our products are medication free.

Bio-Ag specializes in solving agricultural problems rather than just treating the symptoms. Bio-Ag encourage farmers to create environments that promote quality crops and healthy livestock. Bio-Ag carries nutritional supplements and products formulated to keep each animal in optimal health. Conditions differ from farm to farm, so Bio-Ag customizes its recommendations. We use time-tested methods of supporting animal health. All Bio-Ag representatives and distributors are focused on meeting customer needs.

Bio-Ag carries a diverse product line. Our focus is on livestock and related nutritional products. Bio-Ag products are shipped throughout Canada and internationally.

### **OUR VISION**

At Bio-Ag, we envision a world that works in cooperation with nature, leaving the environment healthier and more sustainable for the next generation.

#### **OUR MISSION**

Bio-Ag is committed to developing and offering quality, agricultural products and services that do no harm and work in cooperation with nature.

# Premixes

## Forage Products

Complete Feeds

### Minerals and Premixes – Getting to the Source

Our premixes are different because we source nutrient-dense ingredients. Our goal is to give you healthy animals while maximizing the return on your feed investment.

#### The Bio-Ag Program

The goal of Bio-Ag's nutritional program is to promote overall livestock health with the use of high-quality nourishment, from birth throughout the animals' life. Antibiotic costs and antibiotic-resistant strains of bacteria are increasing; the indiscriminate use of antibiotics is cost-prohibitive. The Bio-Ag program aims to improve herd health, increasing disease-resistance and supporting farmers in minimizing the use of antibiotics. Healthier animals are also more efficient at processing feed and have higher productive efficiencies. Additionally, the quality of the products provided by the animal will improve.

#### Bio-Ag's Proprietary Mineral Blend – EXCLUSIVE TO BIO-AG

Bio-Ag's proprietary mineral blend is exclusive to Bio-Ag. Bio-Ag has its own researched methods for formulating Minerals and Bio-Ag makes premium mineral blends onsite in Wellesley, Ontario, Canada. Bio-Ag has specifically created a blend of minerals including but not limited to Copper, Zinc, Iron, Cobalt and Manganese.

## Copper, Zinc, Iron, Cobalt, and Manganese are all essential dietary elements required by livestock.

- Copper is required for body, bone and wool growth, pigmentation, healthy nerve fibres and white blood cell function.
- Zinc functions in enzyme systems and is involved in protein synthesis, carbohydrate metabolism, and many other biochemical reactions. Severe zinc deficiency causes numerous pathological changes, including skin parakeratosis, reduced or cessation of growth, general debility, lethargy, and increased susceptibility to infection.
- Iron is required to make red blood cells, which carry oxygen around the body. A lack of iron can lead to iron deficiency anaemia.
- Cobalt is essential for rumen microbial metabolism, and to synthesize methane, acetate, and methionine. Cobalt serves as a structural component of vitamin B12, which functions as a coenzyme in energy metabolism.
- Manganese improves reproductive performance.

#### Selenium

Selenium (Se) is an essential trace element for ruminants. It is required in cattle for normal growth and fertility and for helping to prevent health disorders. Selenium is added to the diet to help prevent oxidative damage to the cells.

Selenium is involved in numerous important systems within ruminants, including antioxidant defense, reproduction, and immune function.

Using organic selenium yeast, Bio-Ag can boost the selenium status of livestock reliably and safely.

Benefits of organic selenium in dairy cows:

- Supports metabolic processes
- Supports reproductive health and herd longevity
- Acts as an antioxidant
- Protects the integrity of tissues
- Protects muscles from degeneration
- Supports against infection
- Supports fertility/conception rates

#### Water-Soluble Vitamin B Stress Package

Bio-Ag includes a water-soluble vitamin B stress package in our premix. This gives livestock a head start to better withstand increasingly demanding and stressful production environments.

#### Vitamin E

Vitamin E is a fat-soluble vitamin that is required for livestock growth. There are two types of Vitamin E: Natural and synthetic. Bio-Ag sources natural vitamin E when it is available.

Ask your dealer for more details.

- Vitamin E helps to maintain immune function and animal health.
- Vitamin E is involved with the control of nerves, muscles, and senses.

#### **Premium Phosphate Source**

As the phosphate source for our premixes, Bio-Ag uses mono-sodium phosphate (**MSP**).

It is a superior mineral because it does not contain nitrogen like monoammonium phosphate (MAP). The main reason Bio-Ag chooses **MSP** is that **MSP** does not push up the blood urea nitrogen like MAP. MAP puts stress and pressure on the kidneys.

QUALITIES	MSP	MAP
Contains Nitrogen		Х
Does NOT Increase Blood Urea Nitrogen Levels	$\odot$	
Does NOT Stress Kidneys	$\odot$	

Ask your dealer for more details.

#### **Premixes for Organic Farming Systems**

Bio-Ag produces premixes approved for organic use by Pro-Cert Organic Systems. Bio-Ag can produce a version of most of the conventional premixes listed in this catalogue which could be approved for organic use. These product codes are marked as PCAI (Pro-Cert Approved Inputs).

Always receive confirmation from your certifier before using any new products on your farm.

### **Floorstock Premixes**

Dairy		Size: 25 kg
M01-4	PCAI Dairy White 1:4	
M01-2	PCAI Dairy Red 1:2	
M03-1	PCAI Dairy Gold 3:1	
M1-1*	Dairy Green 1:1	
M2-1*	Dairy Blue 2:1	
M5-1*	Dairy Yellow 5:1**	
Beef (PCAI Only)		Size: 25 kg
M01-1B	Beef Green 1:1	
M02-1B	Beef Blue 2:1	
Goat (PCAI Only)		Size: 25 kg
MG1-1	Goat Premix 1:1	
Sheep (PCAI Only)		Size: 25 kg
MS1-1	Sheep Premix 1:1	
Poultry		Size: 25 kg
M035	Poultry Starter (PCAI Only)	
M34*	Poultry Grower	
M33*	Poultry Layer	
Swine		Size: 25 kg
MP50	Pig Starter 50**	
M2*	Hog Grower	
M4*	Sow	
Horse		
MHP2-1	Horse Mineral	Size: 25 kg
MHP2-1P	Horse Mineral	Size: 8 kg pail



\*Available in Version Approved for use in Organic Agriculture by Pro-Cert \*\*5 bag minimum order

## **Custom Premixes**

To determine the best formula for your livestock, Bio-Ag offers custom ration balancing tailored to your feeding requirements for enhanced livestock nutrition and improved herd health. Your homegrown feeds are tested at a local laboratory to provide accurate analysis information. Bio-Ag has always endorsed Wet Chemistry testing for feed analysis. This testing provides much more precise results than NIR—especially for the mineral content. Bio-Ag incorporates your feeds into the ration to keep purchased feed costs at a minimum.

Custom premixes provide the opportunity to combine your selected supplements into one product to reduce handling and ensure your livestock are receiving the nutrition they require based on the results of our ration-balancing program.

Bio-Ag works closely with you through all seasons of feeding. As your input feeds change, so may your livestock's nutritional needs.

Bio-Ag clients appreciate that Bio-Ag is willing to adjust their rations with each feed change. Bio-Ag can customize each premix order to reflect the excesses or lack of elements in your feedstuffs.

Bio-Ag floorstock premixes supply maintenance levels of Dried Seaweed Base Blend and Bio-Lac. Salt is not included in our dairy, beef, sheep, horse, or goat floor stock. Salt is included in our poultry and swine premixes.

Many of our clients add extra ingredients to further enhance their feeding programs and reduce on-farm labour, including:

- Additional Bio-Lac
- Additional seaweed
- · Redmond Natural Salt to ensure adequate sodium intake

Our 5-bag minimum order for custom mixes allows our clients to purchase small quantities of balanced nutritional packages for Dry Cow, Prefresh, Heifer groups as well as small ruminants.

25 kg bags or bulk totes (minimum 500kg for totes)

Please allow a minimum of three to four business days for production.

## **Custom Forage Products**

#### PCAI Bio-Lac/Seaweed/Sugar Custom Forage Mix

Bio-Ag offers a premium custom forage blend to control ensiling temperatures, reduce nutrient loss and produce sweet-smelling palatable forages.

Recommended for baleage, haylage and corn silage. Application rates depend on moisture and forage type; requires a dry applicator. Contact your Bio-Ag dealer or Head Office for details.

Code: F077 Size: 22.7kg

#### **Bio-Lac**

The lactic acid bacteria facilitated by Bio-Lac help to support gut micro-flora bacteria. Bio-Lac aids lactic acid fermentations in ensiled feeds. Selection of the product depends on the applicator and personal preference. Bio-Lac is our most economical product for its diversity as a forage additive or stand-alone feed supplement.

For application rates contact your Bio-Ag dealer.

Bio-Lac Dry	Size:
P66EA	1 kg
F66P	4 kg
F66E	25 kg
Bio-Lac Dry PCAI	Size:
PO66EA	1 kg
F066P	4 kg
F066E	25 kg
Bio-Lac Liquid (PCAI Only)	Size:
F068E	1L
F067E	4L
F067E5	20L

#### **Gathering Forage Samples**

- Use a bale corer
- Gather from 8-10 different bales or areas of the field when loading loose into wagons
- Place samples into a clean pail and mix them together to make a composite sample
- Fill a 500 ml-1L plastic bag with the composite mix and clearly label
- Freeze wet samples; keep dry hay at room temperature

## **Bio-Ag Complete Feeds**

Building on our philosophy to provide high-quality, value-added products, Bio-Ag is pleased to offer the following complete feeds. We believe strongly in providing only the best products to our customers so they can produce highquality food for the public.

Full ingredient lists are available upon request.

#### **Bio-Ag Calf Starter 16% DM**

Bio-Ag Calf Starter is designed to grow vigorous, healthy calves with welldeveloped skeletal systems. Our calf starter gives calves a good start after birth by supporting the immune system. Our unique formula contains Bio-Lac, Dried Seaweed Meal, Redmond Natural Salt and Bio-Ag Dairy Blue (2:1) Premix.

Code: F64 Size: 25kg

#### Horse Feed 14% Complete Feed

14% premium textured horse feed contains several of Bio-Ag's key products. Dry Garlic is also included to bolster your horse's immune system. This healthy maintenance product is designed to help horses detoxify and keep their system clean. Based on the average weight of 455 kg (1000 lbs), feed a maximum of 2-3 kg/hd/day along with good quality hay.

Code: F61H Size: 25kg

#### **Bio-Ag Poultry Feed**

Bio-Ag's nutritionist has developed a well-balanced group of textured chicken feeds for broilers and layers. All these feeds include Bio-Ag poultry premix and flax meal. Bio-Ag is pleased to partner with Five Star Seeds to produce these feeds. Also, a family-owned business, the Lembke family have been long-time Bio-Ag Clients.

\*Seasonal Stock item (available Apr-Nov and by special order Dec-Mar)

Size: 25 kg bag Code: F63-1 \*Poultry Grower 18% as fed Code: F63-2 Poultry Layer 17% as fed

(1000 kg totes of both poultry feeds are available by special order)

(All special orders require a minimum of two weeks' notice for manufacture; ask about delivery; specific payment terms apply)

## Feed Supplements and Additives

) CHARGE BIC

#### BioCharge (Liquid) - EXCLUSIVE TO BIO-AG

BioCharge is a liquid vitamin and trace mineral supplement for ruminants. BioCharge is a combination of plant extracts, lactobacillus fermentation product, mineral ion complex, premium whey, selenium-yeast, and important vitamins (A, D, E & B). It is an exclusive product to Bio-Ag and is formulated specifically for dairy and beef cattle, calves, sheep, and goats.

#### The Benefits of Using BioCharge

- Supports Feed Conversion
- Water Soluble Ingredients
- Palatable
- · Safe for newborn calves, lambs, kids
- Helps Feed Intake

Product must be shaken/agitated. Keep in a cool, dry place. Viable for up to 12 months, in ideal conditions.

Code: Q701: 946ml Q700: 3.96L Q700: 18.93L (Pre-order Required)



#### OCEANFEED<sup>™</sup> Base Blend

The three seaweed types found in the **OceanFeed Base Blend** are the broadspectrum building blocks for each of Bio-Ag's **Species-Specific** seaweed products. These multi-seaweed options add more nutritional density to an animal's diet compared to a single species seaweed product. Species-Specific Products combine additional, researched seaweeds resulting in proprietary blends that are ideal for each animal group-Bovine, Poultry and Swine.

- Dried Seaweed is a rich source of B-vitamins and minerals which compliment your premix program.
- When a small amount of Dried Seaweed Meal is included in the diet it supports nutritional health and promotes nutrient absorption, thus improving your animals' overall health.

#### Size: 25kg | 1000kg Tote (Special Order) Code: F18 | F18-1000





#### **OCEANFEED™** Bovine

- Helps stimulate appetite
- Promotes feed conversion ratio
- · Promotes good body condition and coat sheen
- Reduces days to market in fat cattle
- Promotes omega absorption

#### Size: 25kg Code: F18BV

#### **OCEANFEED™** Poultry

- · Promotes nutritional health and performance
- Supports better egg yolk colour
- Supports better feed conversion

#### Size: 25kg Code: F18PL

#### **OCEANFEED™** Swine

- Promotes skin condition
- Helps maintain body weight
- Tightening of cell junctions
- · Reduced fattening days/increased production capacity
- Promotes milk yield in sows
- Low in iodine

Size: 25kg Code: F18SW



#### Bio-Lac & Bio-Lac Plus - EXCLUSIVE TO BIO-AG

A healthy microbiome is important for the health and performance of any animal-especially newborn, young, and sick livestock. For animals experiencing digestive challenges, such as medications & stress (heat, transport, co-mingling), keeping your animal on feed and the digestive system optimized is the key to your best return on investment.

Bio-Lac contains a lactobacillus fermentation product which includes vitamins, minerals, amino acids, phytonutrients, biopeptides and other important nutrients. Also included are proprietary, stabilized bacteria, including *Lactobacillus* cells. Optimized levels of beneficial intestinal bacteria modulate stress responses, enhance immunity, stimulate appetite, and support overall animal health.

Bio-Lac can be delivered with antibiotics because it is non-viable bacteria. It provides competitive exclusion in the gut, which means it adheres to the cells and prevents pathogenic bacteria from attaching.

Bio-Lac contains natural plant enzymes. This is a benefit over other enzymes that are derived from several types of molds or enzymes derived from the pancreas of animals. Enzymes accelerate the rate of a chemical reaction to support life. Enzymes are particularly important for animal digestion. Testing done at SORA Laboratories has shown that Bio-Lac contains a variety of enzymes including, but not limited to, protease, amylase, super oxide dismutase (SOD), xylanase, and cellulase.

Plant enzymes work faster and earlier in the animal digestive system to help break down food in the digestive tract. This is advantageous to the animal's well-being.

Bio-Lac supports the innate microbiome with inulin, glycoproteins, proteins, and polypeptides.

Bio-Lac provides vitamins, amino acids, plant-based enzymes, and nutrients that are immediately bioavailable for uptake and use.

There is not another product on the market like Bio-Lac. Bio-Lac is exclusive to Bio-Ag.

Liquid				Dry			
Size:	1L	4L	20L	Size:	1kg	4kg	25kg
PCAI Code:	F068E	F067E	F067E5	Code:	P66EA	F66P	F66E
				PCAI Code:	P066EA	F066P	F066E

# Bio-Lac PLUS

#### **Bio-Lac Plus**

#### For dairy cattle, beef cattle, calves, swine, poultry, goats, sheep, and horses

Bio-Lac PLUS is a lactobacillus fermentation product with naturally occurring plant extracts and our premium mineral formulation! This dry product combines two of our signature products in one convenient, easy-to-store dry feed supplement. Low feeding rates and simple handling, make it perfect for adding to pelleted, top-dressed or TMR feeding systems. Use when feed is lacking in quality or livestock needs an effortless health and production boost due to high stress demands.

#### Size: 25kg Code: M333 PCAI Code: M0333 \*\* \*\* 5 bag minimum order



#### **Dairy NutriPak Feed Supplement**

A unique advance in isolating immune-stimulating antibodies—enhanced with additional whey and selenium yeast to help you maximize the true potential of your herd! Easily added to TMR or grain mix.

Benefits supported by our manufacturer's research:

- Whey-based extracts
- Supports heats & conception
- Supports milk production
- Balanced nutrition helps hoof and leg problems
- Reduced cull rates
- More consistent appetite

Size: 11.36kg Code: V33



#### Dairy Protein Pellets (42%DM)

Ruminants require different protein fractions in their diets to have the ideal proportions of bypass, degradable and soluble protein. Ideal proportions of bypass are important to enable efficient utilization of protein and energy at all stages of digestion. To achieve these goals, Bio-Ag sources a combination of natural plant proteins and carefully blends the ingredients to ensure optimum efficiency, which translates into enhanced production.

Multiple feeding options: TMR, grain mix or top-dress.

- A specially formulated dairy supplement
- An excellent source of energy

Size: 25kg Code: F102 Bulk: F103



Many years ago, when the mountains were being formed near what is now Redmond, Utah, there existed a body of seawater covering an area of massive volcanic activity. This combination resulted in two incredibly unique products available today. First, a natural mineral salt loaded with wholesome nutrients from the pristine and unpolluted ocean waters. And second, a volcanic ash (sold as Anti-Caking Agent in Canada) containing a myriad of natural minerals usually only found deep within Mother Earth.

- For more than 40 years, Redmond Natural salt has served agriculturalists as a natural, healthy solution to meet the nutritional needs of their animals.
- Redmond Natural products are clean from chemicals and pollutants that cause unnecessary harm to animals.
- The utilization of these minerals enables animals to perform the way nature intended.

#### **Anti-Caking Agent**

Redmond Anti-Caking Agent is a trace mineral colloidal silicate, which contains a combination of 50 mineral compounds.

Size: 22.7kg Code: F33



#### **Redmond Natural Salt**

Redmond Natural Salt is unrefined and almost pure salt (95% Sodium Chloride). It provides livestock with many naturally present minerals such as Calcium, Potassium, Sulphur, Copper, Iodine, Iron, Phosphorus, Manganese and Zinc. In ancient times, a tremendous salt-saturated sea existed near presentday Redmond, Utah. Water from the sea eventually evaporated, leaving a bed of rock salt where it lay undisturbed for thousands of years. Due to natural processing, Redmond Natural Salt products are mineral rich. Given a choice, livestock prefer Redmond Natural Salt to manufactured salts.





Redmond Natural Salt Size: 22.7kg Code: F32

Redmond Salt with Garlic Size: 22.7 kg Code: F32-G



#### Redmond Natural Pressed Block Size: 20kg Code: F39B

## **Flax Products**

A standard ingredient in Bio-Ag Mineral Premixes is Flax Oil. Whereas other oils will add fat to the body, Flax Oil converts food to more usable nutrients. In addition to controlling dust in our premix, Flax is beneficial for improved reproduction, increased milk production and increased butterfat. The elevated maintenance and gain energy values for Flax translate to excellent gains in beef cattle.

Flax is the richest known food source of omega-3 fatty acids. Omega-3s have beneficial effects on heart health and the autoimmune system. In addition, flaxseed also contains essential nutrients such as protein, essential fatty acids, vitamins, and minerals. It is also a reliable source of soluble and insoluble dietary fibre and a rich source of lignans. Lignans are phytoestrogens, compounds found in plants and thought to protect against certain types of cancers by interfering with the effects of estrogen.

#### Flax: The Difference

#### Conventional Flax Meal & Oil (Oilcake meal) -

Conventional flax seed is ground, and oil is extracted by pressing or with a solvent-extraction method. The resulting product, after the oil removal process, is flax meal.

#### Organic Flax Meal & Oil —

Organic flax seeds are ground and cold-pressed to extract the oil. The product remaining after the oil is removed is organic Flax Meal. An excellent energy source, flax oil and meal can be easily added to the TMR or top-dressed to raise energy levels when feedstuffs fall short of necessary requirements.

Bio-Ag sources the conventional Flax Oil for our premixes locally.



The oil is pressed frequently, in small batches, to ensure freshness and quality.

A study in Manitoba revealed that when Flax was fed to sows, they experienced less weight loss and maintained more back fat during lactation than sows fed regular rations. They also took less time to come into heat after farrowing. Improved weaning weights were also realized from feeding flax to the sows.



Size:	25kg	Tote
Code:	F106	F106-1
Organic Code:	F62-3	F62-2



#### Flax Oil



Size:	4L	20L	55L
Code:	P21-4L	P21-20L	P21-55L
Organic Code:	P20-4L	N/A	P20-55L





#### Fossil Shell Flour<sup>®</sup> Anti-caking Agent

For millions of years in the waters of earth, diatoms (microscopic plants) took minerals from the waters and created protective shells. They lived and died in vast quantities. As they died, their shells drifted into the water bottom. The material in their shells is mostly silicon trace elements. These deposits are called Diatomaceous Earth (D/E). There are wide varieties of diatoms, as well as salt and freshwater deposits.

Perma-Guard Fossil Shell Flour, when added to feed, coats each of the particles and separates them. Feed particle separation prevents the feed from clumping and allows the feed to flow better. Perma-Guard Fossil Shell Flour is permitted as an anticaking agent in Canada.

\*For Agricultural Use Only\*

Size: 22.7kg Code: F10P



#### www.Perma-Guard.com





Nutri-Mins is a liquid vitamin and trace mineral supplement for livestock. Nutri-Mins includes particularly important vitamins A, D, E, K, and B vitamins, as well as Bio-Ag's own exclusive proprietary mineral blend.

Size: 3.78L 1L Code: V41 V412



#### **Organic Apple Cider Vinegar**

- Use as a water treatment
- 5% Acetic Acid





#### **Magnesium Oxide**

Magnesium oxide (MgO) is the most used source of magnesium for ruminant nutrition.

Magnesium oxide is an essential nutrient for plant and animal life. It is a required element in plant photosynthesis and necessary for animal health.

Size: 25kg Code: F19



#### Garlic – Dehydrated

- Aids Immune System
- Low temperature drying preserves enzyme factor and Allicin content

#### Size: 12.5kg Code: F107-12.5

#### **Citric Acid**

Citric Acid has many benefits. It's a flavouring Agent, acidifier and emulsifier. Citric Acid is known as an antioxidant and pH regulator in animal feeds and poultry feeds.



Size: 25kg Code: F14

#### **Copper Sulfate**

Copper contributes to the maintenance of normal connective tissues.

Size: 22.7kg Code: P80-B

#### Sulphur

Sulphur helps to contain amino acids in livestock and soil. It is a combination of thiamin, biotin, and coenzyme. It is crucial in lipid, energy, and carbohydrate metabolism.

Size: 22.7kg Code: F23

#### Feed Grade Limestone

- A granular high-calcium product
- It is 98% calcium carbonate (38% available Ca)
- · Calcium aids in the formation and maintenance of bones and teeth

Size: 25kg Code: F30

#### Magnesium Sulfate (Epsom Salt)

Magnesium Sulphate is a moderately available source of magnesium. Its application is useful where available magnesium is low. It provides 13% sulphur and 16% magnesium. It is produced by reacting magnesium oxide with sulfuric acid.

Size: 25kg Code: F48

### **Equine Products**

## **OCEAN EQUINE**

#### Dried Seaweed Blend Pellets for Horses, Ponies & Foals

If used as recommended, Ocean Equine:

- Helps to maintain a balance in intestinal health
- Promotes a healthy gut microflora
- Promotes digestive function
- Supports better nutrition
- Promotes athletic performance and vitality
- · Promotes muscle and joint health after strenuous training
- Promotes reproductive functions
- · Help maintain proper metabolism and well-being
- · Helps to maintain healthy immune system functions
- Supports natural defense
- Promotes a shiny coat and healthy hooves

#### Directions for Use – Administer Orally per Day

Weanlings:	14g
Yearlings:	27g
Ponies:	28g
Mature Horses:	45g

Size: 3kg Size: 13kg Code: F18EQLRP Code: F18EQLRB





#### Liquid Vitamin & Mineral Supplements for Horses

Eberglo is a mix of lactobacillus fermentation product, natural plant extracts and premium minerals and vitamins, which all help your horse look and feel its best. Eberglo contains vitamins and provides a source of critical nutrients.

#### Feeding Directions:

Adult horse: 6-10 ml/head/day, on feed or in water

Draft horse, racing horse, pregnant mare, or overweight horse: 8-10 ml/head/day, on feed or in water.

<u>Foals and Ponies:</u> 1 ml/100 lbs. of body weight per day, on feed or in water <u>Newborn:</u> 2 ml orally for first three days

Size: 946ml 3.78L Code: V101 V401

Bio-Ag Horse Mineral – 8.5kg, 25kg (pg. 6) Bio-Ag Horse Feed 14% Complete Feed – 25kg (pg. 9)

## Dog Food

## Norman's Naturals

Made with Seaweed

#### Premium Dog Food Chicken & Brown Rice Formula

#### No Wheat. No Corn. No Soy. No Artificial Flavours. No Artificial Preservatives. Low in Sodium.

Bio-Ag's premium Chicken and Brown Rice formula includes many of the excellent products and ingredients used for all our nutritional formulas. Bio-Ag's customers and dog breeders all agree this is an excellent source of nutrition for a healthy, happy dog. Their dogs just love the flavour!

Formulated to meet the nutritional levels established by AAFCO (Association of American Feed Control Officials) for Dog Nutrition Profiles of all life stages, including growth of large dogs (70 lbs. or more as an adult).

We recommend that you keep your dog in ideal body condition and not allow them to become overweight. The exact amount of food your dog requires must be adjusted according to age, activity & environment. Our feeding guidelines printed on each bag are for an average, active, adult dog fed once daily.

#### **Guaranteed Analysis**

Crude Protein	25% min
Crude Fat	16% min
Crude Fibre	3.5% max
Moisture	10% min

Size: 18kg Code: F96N

## Animal Healthcare Products

## **Homeopathic Remedies**

Homeopathy is a natural system of medicine and a well-established healing system.

Known to the ancient Greeks, the modern system of homeopathy was introduced and developed in the 19th century. Today homeopathy is wellaccepted as a safe and effective alternative medical treatment. Homeopathy has a significant role in both curative and preventative medicine.

A homeopathic system can be employed to the benefit of the livestock farmer by utilizing these two approaches:

- 1. Preventative Medicine Approach
- 2. Therapeutic Approach or The Emergency Treatment of Individual Cases

#### How Does Homeopathy Work?

Homeopathy is a healing process in which the medicine stimulates and encourages the body's natural healing forces of recovery. Based on the practice of treating "like with like" - treating an illness with a substance that produces similar symptoms in a healthy body to those experienced in the sick body.

PLEASE NOTE: Certified Organic customers should always check with their certifier, prior to use of any products.

#### Homeopathic Kit

#### **Contents of Kit:**

- Homeopathic Checklist Pad
- 100ml bottle of Liver Tincture
- 100ml bottle of Bio-Lac Liquid
- 27x 30ml bottles of commonly used homeopathic remedies
- Homeopathic Alternatives & Feed Supplements for Farm Animals Reference Book (also available for purchase separately)
- Plastic case for easy storage



#### **Remedies in Kit:**

Aconite 30c	Colubrina 30c	Phytolacca 30c
Apis 30c	Conium Mac 200c	Pulsatilla 30c
Arnica 30c	Hepar Sulph 30c	Sepia 30c
Bacillinum 200c	Hypericum 30c	Silicea 30c
Belladonna 30c	Kidney Remedy 30c (Apis-Bryonia- Lycopodium)	Staph, Strep, E.Coli 30c
Bryonia 30c	Ledum 30c	Bio 87 (Anti-Viral)
Cal Phos/Mag Phos 30c	Lycopodium 1M	Bio 88 (Anti-Bacterial)
Caulophyllum 30c	Mastitis Remedy 30c	Bio93 (Immune System Booster)
Cocci Remedy 30c	Phosphorous 1M	

Size: 27 Remedies (Pre-Order Required) Code: D302

#### **Protein Feed**

A liquid whey product used to bolster the thymus gland through the nutritional aspects of this product —partners well with Vitamin C. Ask your Bio-Ag dealer for more information. **No milk withdrawal!** 

Vet script required for off-label use of this product.

Size: 120ml Code: W1



#### **Vitamin C Crystals**

- Ascorbic Acid has been known to strengthen the immune system
- 97.5% Coated Ascorbic Acid crystalline powder
- · Works well for groups of animals
- Can be added to feed
- Water soluble
- Keep in cool dry area

Size: 1kg Code: P83-1

#### Liquid Vitamin C

Currently not available.

## Soil Amendments & Fertilizers

## **Soil Amendments**

## Diseases are created mainly by destroying the harmony within the elements of the soil.

Our soil amendments add cost-effective nutrients to the soil: dry & liquid Humic products, Mineral Grow Granular Soft Rock Phosphate, Seaweed-liquid & dry, Magnesium/Potassium/Sulphur.

Soil analysis is available through an independent 3rd party lab.

#### Humalite AG 4 Dry [Black Earth], Liquid Carbon, Keal [Fulvic Liquid]

In soil applications, Black Earth improves water-holding capacity and microbial growth.

Humic Acid = Big molecules; that unlock nutrients and bind them, which makes nutrients more available to plants.



Fulvic Acid = Small molecules; more biological activity than humic acid.

Size:	25kg	909kg Tote (Pre-Order Required)	10L	10L
Code:	F15	F15T	FER15-10	FER15FC-10

#### Mineral Grow Granular Soft Rock Phosphate 0-3-0

An extremely fine clay containing Phosphorous, Calcium and Valuable Trace Minerals.

- Colloidal-consists of ultramicroscopic particles contributing to greater absorbance
- More available than Rock Phosphate
- 20% Calcium contributes to increased pH
- Slow release offers multi-year value
- Low water solubility

Size: Tote 909kg Code: FER11T



Atlantean Plant Fertilizer – Liquid Concentrate (Minimum NPK: 2-2-1; 3 % available Calcium)

Manufactured locally, this product is custom formulated for lawns, vegetable, and flower gardens. It contains molasses, nitrogen, phosphorus, minerals, vitamins, and micronutrients. These nutrients feed the soil life.

When the soil life is fed, active domestic plant growth will excel.

Size:	1L	10L
Code:	FER39	FER38 (Pre-order Required)

#### Custom Kelp Fertilizer Mix (PCAI)

This product is based on research done in the 1960's at Iowa State. The components of this mix discourage and drive away corn rootworm, reducing crop damage. The use of this mix has also been found to increase Brix reading and increase root growth when compared to non-treated corn.

If corn crop is following another row crop, then the application of Custom Kelp Fertilizer Mix is advised.

Size: 20kg Code: FER14



#### Bio-Ag Lawn & Garden Mix 0-5-2

Bio-Ag's specialty fertilizer mix is composed of natural ingredients that can be used on lawns or gardens.

Ingredients: Mineral Grow Soft Rock Phosphate, Dried Seaweed Meal, Carbonatite, Gypsum, Basalt, Mg-K-S, Boron, Humalite AG 4, Minerals and Marl.

#### Size: 20kg Code: FER35

#### **Organic Dried Seaweed Meal**

- · Unprocessed brown, green and red seaweed
- · Supplies organic matter and naturally chelated nutrients
- Soil conditioning properties
- Valuable addition to fertilizer mix

#### Size: 25kg Code: F18

#### Organic Stella Maris<sup>™</sup> Seaweed (NPK: 0.5-0.2-17)

- No preservatives or sodium hydroxide
- For foliar applications-dissolves well in water & will not clog nozzles
- Increase quality & yield
- Improves plant vigour, root growth and plant establishment



- Apply at 1.5 to 2 litres per acre starting with a transplant treatment or a soil treatment at planting
- Repeat soil or foliar applications every 7 to 21 days until harvest is complete

Size: 9.45L (Seasonal; Pre-Order Required) Code: FER180

#### Magnesium-Potassium-Sulphate Sulphur 22%-Potassium 18%-Magnesium 11%

A soluble sulfate of potash-magnesia. It is a crushed mineral that will not alter the soil pH. Apply where magnesium and potassium are deficient, and calcium is abundant.

NOP COS

Size: 25kg Code: F22

#### Boron

This product is 20.5% boron and is water soluble. Boron is an essential micronutrient for the healthy growth of plants. Maintaining adequate levels of boron in soil and crops is critical for animal health.

Size: One Size (Pre-Order Required) Code: F10S

#### **Spritzer Garden Duster**

The Garden Duster is effective at applying dry products in your garden. The Garden Duster allows the powder to get under the leaves of plants where bugs live. An excellent tool to dust fine powders over and under plant foliage in gardens or flower beds. Works well to dust under dense leaf/plant growth.

**Directions:** Fill the cylinder with your desired product then carefully insert plunger and direct at plants.

#### Size: One Size Code: F10S

We recommend Sittler Manufacturing at Linwood, ON to formulate customized soil amendment mixes that work for your soil and farm conditions: 519.698.2094

## Water

#### **Stenner Pump**

Stenner Peristaltic pumps are particularly well suited for applying even the smallest quantities of product. It is easy to install and requires minimal maintenance.

Size: 110Volt 220Volt Code: WAT1 WAT11

#### Hydrogen Peroxide

Bio-Ag sources 35% National Standards Foundation (NSF) 60 Grade Hydrogen Peroxide. NSF grade is the highest grade, the only grade deemed safe for drinking water treatment. It is an effective alternative to chlorine treatments in livestock barns and septic systems.

- · Cleans up and helps breakdown waste in septic tank systems
- Aids in breaking down manure in pits when agitated
- Along with white vinegar, ensures that milk pipelines are kept clean in dairy barns

Size:	4L	20L	55L
Code:	WAT3-2	WAT3-1	WAT3

#### **Peroxide Test Strips**

These test strips are used to check the level of Hydrogen Peroxide in your sample. By dipping the test strip into the sample, you can compare the test strip colour change with the test pattern found on the container to learn the concentration of peroxide.

#### Size: 50 Strips Code: WAT4-1

#### 20% Agricultural White Vinegar

Bio-Ag White Vinegar is an effective alternative to harsh chemicals in your dairy pipeline. Bio-Ag white vinegar is 20% acetic acid.



Suggested Use:

In a 20-gallon sink - Rinse/Acid Cycle - 70ml White Vinegar

#### Works well with H202 and TCI 1227 Liquid Soap.

Size: 4L 20L 55L Code: F55 F57 F56



#### TCI 1227 Liquid Soap

TCI 1227 H.D is designated for the closed system of hot aqueous cleaning of plastic, rubber compounds, glass, and all ferrous metal alloys, and general cleaning and sanitation of walls and odours.

- Odourless, fast sheathing, quick drying, harmless
- Not dependant on hardness
- Non-etching or clouding
- Beneficial to the environment

Size: 20L Code: 017

#### **EZI Action Drum Pump**

The hand pump is for hand dispensing of variety of liquids safely and reliably from our 55-litre container. This pump provides a safe and clean method of dispensing Hydrogen Peroxide, Flax Oil and Vinegar.

Size: One Size Code: WAT3-P



### **Services**

Bio-Ag representatives are experts in the field, literally. They will give you straight forward answers regarding your specific agricultural problems.

The variety of services provided include:

- Livestock Nutrition
- Ration Balancing and Feed Sampling
- Customized Premixes
- · Homeopathic Alternatives to Animal Healthcare

#### **Ration Balancing**

Bio-Ag staff design completely balanced minimum-cost rations.

Bio-Ag focuses on maximizing the amount of protein and energy a farmer can obtain from homegrown feedstuffs, to limit the amount of purchased feed.

Through feed analysis, Bio-Ag can advise how to:

- Use their resources efficiently and effectively
- · Properly balance their animal feed rations for the best value
- Use a customized premix specific to each feed combination

#### Lab Testing

Bio-Ag is pleased to offer a variety of supportive tests through outside labs to provide further details for your farming operation.

Key tests include, but are not limited to:

- Feed analysis (by wet chemistry)
- Water (many options available)
- Soil
- · Mold identification and mycotoxins screens
- · Feed fermentation analysis-volatile fatty acids

Bio-Ag Head Office can confirm the sample collection and submission details.

### Home

#### **Redmond Real Salt—Table Salt**

The incredible taste of Real salt is truly unique and something only Mother Nature could create.

We bring Sea Salt and flavoured salts to you in their natural state, without additives or chemicals of any kind.

First taste Real Sea Salt then try any other salt. The difference will amaze you!

Ask about flavoured options.

Size:	283g	737g	<b>11.33</b> kg
Code:	016	015	014

## **Important Information**

#### What are GMOs?

Genetically engineered or genetically modified organisms (GMOs) are created by taking genes from organisms such as bacteria, viruses or animals and inserting them into other, often unrelated, species. Unlike traditional breeding, genetic engineering creates new organisms that would never occur in nature, creating unknown and unpredictable health and environmental risks.

The term 'genetically engineered (GE) food' refers to any product containing or derived from GMOs.

In Canada, up to 70 percent of the processed foods in grocery stores contain GE ingredients.

The most common GE ingredients come from crops like corn, soy, and canola. Biotech companies genetically engineer these crops to produce a pesticide or to withstand the application of herbicides.

#### Organics

Bio-Ag frequently works with organic certifiers and government regulators.

We can work with your certifiers and provide up-to-date information to them as required.

With the Canadian Food Inspection Agency [CFIA] overseeing organics in Canada, regulations and interpretations are constantly changing. We are continually striving to stay current while serving our customers.

#### **Certifications/Listings Legend**

**COS** – Meets Canadian Organic Standards and is listed on Permitted Substances list.

NOP – US equivalent of COS

**Pro-Cert Approved Input** – This product is an approved Pro-Cert Input **Pro-Cert Organic** – This product is certified organic by Pro-Cert

## **Terms and Conditions**

Bio-Ag Consultants and Distributors Inc. Staff and Dealers (hereafter known as Bio-Ag) are committed to providing our customers with quality products and services.

#### **CUSTOMER PAYMENT POLICY**

Terms are Net 30 days of the invoice date. Cash, cheque, Debit, Visa, MasterCard and electronic payments through banking institutions are accepted.

Our customers can pick up orders at Bio-Ag's head office:

1400 Greenwood Hill Rd., Wellesley, ON.

We also deliver in designated areas. Other shipping options can be requested. We reserve the right to request a credit application at any time.

NOTE: Statements are emailed at month-end for past due accounts only (31+ days). Please ensure that you retain your invoice for reference.

All special-order items are non-refundable and non-returnable. Special terms apply.

All product remains the property of Bio-Ag until paid in full.

#### **CUSTOMER SERVICE**

Bio-Ag is committed to you, the customer. We strive to meet our customer's needs completely and efficiently. We encourage you to call us with your questions. If we do not answer your telephone call during business hours, our 24-hour answering service enables you to leave your order or message with your name, address, and contact details. We will return your call as soon as possible.

#### LIABILITY DISCLAIMER

Bio-Ag will not be liable for the wrong usage of any product that we sell. The user assumes the full responsibility when a product is dispended, dispersed, administered, or used in any manner.

It is the responsibility of each user to read the product label directions and to use the product consistent with its labelling.

(All products sold by Bio-Ag are manufactured in feed grade [agricultural] facilities and are not meant for human consumption.)

#### PRICE DISCLAIMER

Our prices are subject to change without prior notice. Please call for current pricing. Our dealers and customer service personnel will be ready to answer your questions.

#### **ORGANIC SYMBOL DISCLAIMER**

The products in our catalogue that have the organic symbol are products that, according to Bio-Ag's understanding of our suppliers' written and verbal information, are suitable to use in organic farming practices. However, it is the sole responsibility of the purchaser to evaluate whether the products bought are accepted by the purchaser's organic certifying agency.

#### **INSPECTION OF SHIPMENTS**

Please **notify Bio-Ag within 24 hours of receiving your shipment** of any damage, failure to receive product, incorrect quantity of goods or products. This allows us to respond in a timely fashion to any concern. Failing to do so, the customer is deemed to have accepted the invoice/shipment as accurate.

Bio-Ag's customers are encouraged to inspect each shipment of product upon its arrival. With 3rd party transporters, the responsibility for damage that occurred during shipping is upon the shipping company unless the damage occurred due to unloading by the receiving party/customer.

## **Terms and Conditions**

#### **PRODUCT RETURNS**

All sales are deemed to be final. Returns are rarely allowed due to bio-security concerns. If allowed, specific criteria must be met. Product must be unopened, clean and in its original factory condition.

#### AFTER 30 DAYS, A 10% RESTOCKING FEE WILL APPLY. AFTER 60 DAYS, NO RETURNS OR CREDITS ARE AVAILABLE.

Shipping costs for returned goods are the responsibility of the purchaser unless a mistake has been made by Bio-Ag. The responsibility of Bio-Ag is limited to reimbursement of return shipping costs of wrong items that were shipped by mistake.

#### **ORDER CANCELLATIONS**

Order cancellations are accepted on floor stock until the time of shipping. Custom mixed products can be cancelled until the point of production. Special orders from outside suppliers can be cancelled until order is placed with that supplier. Cancellations after shipping occurs will result in a default to the procedures listed in the above Product Return Policy.

#### **OUT-OF-STOCK ITEM POLICY**

Any items that are out-of-stock when a customer orders, will be handled according to the following terms: Shipment of the entire order will be held until the order can be shipped in full when that is acceptable for the customer.

#### SALES TAX POLICY

Many of Bio-Ag's products are zero-rated for taxes. However, we must charge it on all tax-applicable products. In Ontario, the tax charged is based on product classification and in a few cases quantity.

For other Canadian locations, the tax rate of non-zero-rated products is dependent on destination.

#### **RETURNED CHEQUE POLICY**

Bio-Ag charges a \$30.00 fee for any cheques that are returned because of insufficient funds.

The customer will also be responsible to pay any additional charges that may be incurred from the bank. Bio-Ag reserves the right to cease sales to any client due to poor credit history.

## WARRANTIES, DISCLAIMERS, LIABILITY LIMITATIONS

Bio-Ag warrants that all products manufactured by it will contain the ingredients described in their packaging or provided on request, subject to immaterial variations. Bio-Ag provides no other warranty or performance guarantees with respect to any products or services by itself or its Dealers.

Bio-Ag provides no warranty whatsoever for products it does not manufacture.

## **Bio-Ag Dealers In Your Area**

#### Canada

#### **ONTARIO**

Belmore & Area Dennis & Carol Batte 519.392.8000

Chesley Elwood Kueper 519.363.9493

Clinton & Watford Area Henry & Janet Boot 519.525.7232

Hickson & Norwich Area Brian Middleton 519.462.3012

Niagara Region & Area Bob Comfort 905.386.6151

Peterborough & Area John Sweeting 613-478-5790

Princeton & Haldimand Area Jeff Campbell 519.458.8810

Vankleek Hill Marc & Stephanie Raynaud 613.678.6032

Wellesley/Woolwich Township Ted Glauser 519.574.3065

#### Companion Ross Leis 519.616.2233

#### MANITOBA

Hans Steinmann Arnes MB 204.380.3914

#### **BRITISH COLUMBIA**

Brian Kielstra Abbotsford, BC 604.302.6333

#### ALBERTA

Rick Stam Red Deer, AB 403.350.6088

#### PEI

Mark Bernard Freetown, PEI 902.887.3188

#### **NOVA SCOTIA**

Marvin Weber Somerset, NS 902.261.2077

#### **NEW BRUNSWICK**

Murray Bunnett Steeves Settlement, NB 506.756.8261

Mark & Isaac Wilson West Branch, NB 506.523.9038

#### QUEBEC

Jacques Morin. DVM Saint-Lazare, QB 450.455.5557

### USA

#### Natural Feeds &

Fertilizers Inc. John Smoll & Family Sturgis, Michigan 269.651.1566

## Dairy . Beef . Goat . Sheep Hog . Horse . Poultry

#### Why we recommend Bio-Ag Premixes...

They are balanced to ensure the vitamin and mineral requirements of your livestock are being met.

They encourage healthy digestion due to the Bio-Lac we add. Bio-Lac is our Lactobacillus and plant extract product (See page 14 for details).

Our premixes contain our proprietary premium mineral blend.

Customized premixes are formulated to balance and maximize the benefit of your on-farm forages.

Premixes are manufactured from a consistent supply of quality product in our HACCP, Feed-Assure, COS and COR certified facility. Bio-Ag is also Ractopamine-Free, medication-free, Pro-Cert compliant and has staff that can help you comply with the CQM program.

Premixes may be placed on a standing order with automatic reminders, free delivery, and professional feed sampling services to ensure your operation runs smoothly.

#### Custom Premixes are also available

Available in . 25KG bags . Bulk Totes (min.se

approved for Organic use also available

Bio-Ag Premixes contain all major minerals including Calcium, Magnesium, Phosphorus, Potassium, Sodium and Sulphur. Trace minerals are also present. Balanced major and trace minerals are all needed for maximum productivity





## Liquid Vitamin & Trace Mineral Supplement for Ruminants

The Benefits of Using BioCharge:

Supports Feed Conversion
Water Soluble Ingredients
Palatable
Safe to Use On New Born Calves
Helps Feed Intake



1-800-363-5278

www.bio-ag.com