



Spring 2009

Bio-Ag Newsletter

Murray's Musings

Inside this issue:

Murray's Musings	1
Seminar Overview	1
Announcements	2
Product Updates	2
Wind Turbines & Electrical Pollution	3
Specials	4
Coming Events	4

Welcome to our spring newsletter. For those of you that missed our January seminar you certainly missed an amazing couple. Dr Puzstai and Dr. Bardocz, our keynote speakers from Scotland, have worked for years to understand and explain to us the ramifications of genetically modified food. I think our problems are only going to get worse as we get into the

triple-stacked technology that is starting to come our way. I have always said that I would be dead and buried by the time that these results started to hit, but more than ever I am beginning to see that these negative results are emerging earlier and earlier. Let's hope that I'm wrong & that the GMO people are correct; if not, we've got a terrible mess coming down the road at our young people.

In this newsletter I would like to focus on our custom forage products and how they should be used and under what conditions. Some of our best selling products in the spring and summer are these products. Over the years, they have proven to do a terrific job and to help farmers maximize the nutritional value on their forages: dry

(Continued on page 2)

Seminar Overview

World-renown scientists Dr. Arpad Puzstai and Dr. Susan Bardócz spoke to over 200 farmers at our annual January Seminar. They spoke about their research and how it revealed the health risks of Genetically Modified (GM) foods. An overview of David Colling's talk about electrical pollution is on page 3.

During his talk Dr. Puzstai reviewed research that has occurred over the past 10 years on GM food. The results from the Ermakova experiment were particularly interesting. During this study rats were fed GM and non-GM soy. Conclusions were that litters from rats fed GM soy had a higher number of dead and those that survived weighed less. "What does this mean for your livestock?" asked Dr. Puzstai. "The problems caused by GM food may not be noticeable in the first

generation but we should be concerned about future generations."

Dr. Susan Bardócz, Professor of Nutrition at the Agricultural Faculty of University of Debrecen, Hungary, spoke about how food has changed over the past century. Since the second world war we have undergone rapid mechanization and increases in yields. This has also been accompanied by huge increases in chemical usage. "In 1940 no man made chemicals were found in the body of an adult, now it contains measurable traces of 300-500 chemicals and the average is 77 per person."

"We now have a situation where we are fat but starving," says Dr Bardócz. "We are consuming too many



Pictured: Florence Bast, Dr. Arpad Puzstai, Murray Bast & Dr. Susan Bardócz

chemicals, preservatives and high fructose corn syrup. This corn syrup is converted straight into fat." Another example from Dr Bardócz is potatoes. "Potatoes from 1955 to 1999 lost all Vitamin A and Vitamin C levels have decreased 57%." We now need to consume more calories to get the nutrients we need from food. The challenge to consumers is that in order to ensure they are purchasing non-GM and pesticide free products they need to buy certified Organic food because GM food is not labeled.

Genetically Modified (GM) Foods Update

Corn, soy beans, canola & cotton are the most common types of GM crops. The newest GM crop to come to market are Sugar Beets.

GM sugar will be mixed with non-GM sugar so even food producers will not be able to specify their supply is free from GM sugar unless it is Organic.

Sugar Beets are wind-pollinated so cross-contamination with non-GM sugar beets will be challenging. Related vegetable varieties such as green and red chard and golden and red table beets are also at risk.

You can avoid GM sugar by purchasing products made with "sugar cane," "cane juice" or "certified organic".

Murray's Musings (cont'd)

(Continued from page 1)

hay, balage, haylage, corn silage and also high moisture corn.

My first suggestion is that every farmer should own a refractometer [Brix meter] so that you can measure the actual Brix level [sugar level of plant]. If you are making haylage, **custom Bio-Lac/Kelp** is a great product if your Brix readings are reasonable-Brix 8 or higher.

If the Brix level is 7 or below, you probably should consider using **custom Bio-Lac/Sugar**. This may give a better fermentation because, at 7, your plant sugar levels are probably going to be quite low in your forages. Improving the Brix level will help to produce a more palatable, sweet smelling product.

We will be placing an order for refractometers. Call the office to place your order by **May 1st**. Call for pricing.

One of the things that the **Kelp** seems to do is to absorb some of the moisture if you are making dry hay. Of course, when you are making dry hay its important to remember that the higher the moisture the more of this product you

need to apply. With our newer, bigger balers we're getting a much better picture of where our moisture levels are.

Moisture levels directly impact how much **custom Bio-Lac/Kelp** you need to add. It is very critical to match these correctly. Confirm suggested application rates with your Dealer or the office staff.

If you were making corn silage that has not fully matured [still milky & cobs not formed], then probably it would be wise to use **custom Bio-Lac/Sugar**. **Bio-Lac/Kelp/Sugar** is recommended with slightly more mature corn [yellow & dented kernels]. What you want is a sweet smelling product when it is done fermenting. Ideally, fermentation should be completed within one week. If it takes longer than a week then you have a problem.

Longer-fermented forage tends to reheat. Then you also have a problem with secondary fermentation, which can lead to digestive upsets & mold toxicity for your livestock.

One of the best ways to minimize secondary fermentation is to feed out the forage as soon as you take it out of your bunker or

your silo. It's best to not have any sitting around for extended periods of time.

Straight **Bio-Lac** or custom **Bio-Lac/Kelp** is a great addition for high moisture corn. It appears from client experiences that any kind of GM corn or triple-stacked GM corn will not ferment nearly as well as conventional hybrid corn or open pollinated corn. All in all, I'm not all that sure that we are getting the same nutritional value from our high moisture GM corn compared to regular hybrid corn.

We know for sure that corn with the BT gene in it is very hard on the digestive system of cattle and hogs. I'm not exactly sure what we will see coming down the road from the triple-stacked varieties, but it will develop before we know it.

One of the biggest problems is that people are not cognizant, aware or fully/properly informed of the side effects of genetically modified organisms. Many of these organisms are taken from bacteria to be put into the gene structure of the seed. As a consequence, as I have said many times before, Maple Leaf Foods will never get rid of listeria in their plants again-ever because of all of the GM food being fed to the animals that are being processed through the facility in Toronto. It just is not going to happen. Other producers and processors are going to have these same problems as well down the road.

Thank you for your continuing support of our philosophy to *Work with Nature Naturally*. Best wishes for a successful 2009 cropping season. *MB*

Product Updates

Redmond NTM Random Rock Salt Chunks are currently not available from our supplier.

Dan, our purchaser, has learned that normally the rocks are blasted from the mine floor. The mine Redmond Minerals is currently working is gradually narrowing the distance between the floor & ceiling. These close confines do not allow safe blasting at this point, so there is very little material available for random rocks.

Redmond plans to open a new mine in 2010; we'll further advise on availability at that time.

The **pressed blocks [44#/block]** are still available. This is currently is our only alternative to loose salt. The pressed blocks are Acceptable for Organic Use [AFOU].

Redmond assures that the process of making these blocks has improved over the past 2 years, so hopefully the integrity of the block will be maintained through outdoor use and humidity. Please provide us with feedback as we enter the spring and summer months.

35% Hydrogen Peroxide

Security regulations for 35% Peroxide have changed and now require photo identification for each purchase. Changes are now enforced by Natural Resources Canada (Explosives Act). This is similar to regulations implemented June 1/08 related to ammonium nitrate. See www.nrcan.gc.ca.

For those customers who do not wish to comply with this request 25% Hydrogen Peroxide will be available in 55L barrels for the same price.

Announcements

For Sale

Organic Hay 1st & 2nd cut large squares.

Organic straw large squares.

Call: Steve Streicher 519-595-4237

* * * * *

Bio-Ag Sales People Wanted

We are searching for new dealers across Ontario. If you are interested check our website or call Becky at 519-656-2460

Electric Fencers & Electrical Pollution

David Colling spoke to Bio-Ag customers at our annual January seminar. David spoke about electrical pollution and issues with wind turbines.

He explained that dirty electricity is 60Hz electricity polluted with high frequency signals. Wind turbines are producing dirty electricity because of their inverters that are changing power from DC to AC. David lives in Bruce County and has been asked by many neighbours to measure what is happening to the electricity in their homes and barns. He has even been asked to advise municipal councils regarding wind turbines.

One of the other issues that has been raised regarding wind turbines are the sound frequencies produced. Each part of the body has a resonance frequency and wind turbines produce sound both in the audible sound ranges and infrasound range. Symptoms of Vibroacoustic Disease (VAD) and Wind Turbine Syndrome (WTS) include headaches, dizziness, tinnitus, sleep disorder and fatigue.

It is advised that wind turbines be placed at least 2 km from homes and that designs be changed to reduce dirty electricity and ground current problems.

Thank you Dave for your informative talk and we look forward to learning more about this emerging topic.

EMF Prevention Tips

- Only use a cellular phone for emergency back up, if required use a Bio-Pro chip
- Avoid the use of cordless phones. They can produce RF radiation as high as cell phones. If required, choose 900mhz cordless phones before the higher frequency phones or DECT phones. The 2.4ghz phones constantly broadcast to their base stations where as the majority of 900mhz phones do not.
- Avoid purchasing a home within 500 feet of high voltage power lines
- Maintain distance from the TV & other electronic devices & appliances
- Avoid the use of fluorescent and halogen lights, use incandescent full spectrum lighting
- Unplug an electric blanket or waterbed heater before getting into bed
- Avoid the use of electric motors – such as an electric can opener and an electric toothbrush or shaver. Rechargeable or battery operated, toothbrushes and shavers are preferred to plug-in models
- Avoid the use of a microwave oven. If using a microwave oven, leave the area. The RF (Radio Frequency) will cover a large area
- Remove all dimmer switches used in the house
- Locate the power panel at least 10 feet from living/ sleeping areas

We recommend that customers test their homes with a Graham-Stetzer Microsurge Meter. To receive more information about Stetzer Filters & Meters go to www.bio-ag.com/electrical or call the office.

Disclaimer The information presented gives general advice on EMF symptoms and protection. Always consult your naturopath or doctor for your individual needs. The information in this paper is designed for educational purposes only. It is not intended to be a substitute for informed medical advice or care. You should not use this information to diagnose or treat any health problems or illnesses without consulting your naturopath or family doctor. Please consult a naturopath or doctor with any questions or concerns you might have regarding your health.

Payment Methods Available & Discounts

Bio-Ag accepts the following methods of payment (on current Retail accounts):

Visa or Mastercard payments for purchases and account payments—no discounts available

Cash or cheque—3% cash discount allowed on product only (except monthly special which already have a 5% discount) excluding freight/shipping charges & tax, if paid within 5 days of invoice date

Electronic payments with the following financial institutions—CIBC, Bank of Montreal, Scotia Bank, TD Canada Trust, Royal Bank, Credit Union's.

A 3% discount as above for cash or cheque can also be taken if payment is made within 5 days of invoice date

Prepayment Terms:

If customers wish to prepay their account they will be given the following credit:

4 % for prepayment of \$2,000 to \$5,000

5 % for prepayment over \$5,000

Seasonal Products

Seasonal Products— place your order by March 31 for guaranteed pricing. Delivery & payment by May 1st.

We are now conducting **quarterly price reviews**. (January, April, July & October). This allows us to offer our customers the best price in an ever-changing market. You will notice that as of **April 1st** some of our **premix prices** are being **lowered** and we are happy to announce that the price of **Kelp Meal** will remain **unchanged** until our **next review**.

Call your local dealer or head

1400 Greenwood Hill Rd
PO Box 189
Wellesley, ON NOB 2T0

Local: (519) 656-2460
Toll Free: (800) 363-5278
Fax: (519) 656-2534
Email: info@bio-ag.com

Working With Nature ~ Naturally



We're on the web!
Visit: www.bio-ag.com

Celebrating over 25 years in business, Bio-Ag is a company committed to developing and distributing quality agricultural products and services that work in cooperation with nature's biological systems. Our goal is to provide ecologically sound solutions for all of your agricultural needs. Bio-Ag carries a diverse line of natural products including Bio-Ag's very own Probiotic—Bio-Lac, and our line of naturally chelated Mineral Premixes, produced and quality controlled on site for all types of livestock. Bio-Ag continues to serve you any way we can and we appreciate your feedback on how we can offer better services and products—reliably and efficiently.

Spring Specials ~ 5% Off

March

Stalosan F 25kg bag & 10kg pail

- Helps prevent infection
- Improves the environment around animals in order to optimize health, growth & feed utilization
- Economical & easy to use



April

Acadian Soluble Seaweed Powder 20 kg box

- Increases growth, development and sugar content in plants
- Extends shelf life of fruits and vegetables
- Improves plant appearance and colour



May

Bio-Lac Kelp Custom Forage Additive Bio-Lac/Sugar Custom Forage Additive (50 lb bag)

- Customers report enhanced fermentation (May be due to increased lactic acid presence)
- Customers report increased palatability; sweeter smelling forages



Organic & Non-GMO Seed Providers

We are happy to provide our customers with some options for Organic & Non-GMO seeds this spring. We cannot comment on quality or variety of seed; we're just providing information. Customers need to call the supplier directly.

Homestead Organics—1-877-984-0480

DeDell Seeds, London Head office (call for local salesperson)
519-473-6175, GMO-Free seeds
Doug Shirray—519-655-2570

Below are some other links to help with your search:

Organic Seed Sources (COG) <http://www.cog.ca/documents/SeedlistingWI06.pdf>

Seed Directory (EFAO) <http://www.efao.ca/pages/directories.html>

OMRI Organic Seed Database <http://seeds.omri.org/>

Suppliers of Seed for Certified Organic Production (ATTRA)
http://attra.ncat.org/attra-pub/altseed_search.php

Spring Clearance Sale

We have a few items we would like to clear out of our inventory:

- Gandy applicator (only 1 available)
- Livestock Safety Cushions
- Full spectrum light bulbs
- Lubribio
- PM 16 Pumps (110v & 220v)
- 3M Vet wrap

Upcoming Events

April 10—Good Friday, Bio-Ag CLOSED

April 13—Easter Monday, Bio-Ag OPEN

May 29—Bio-Ag CLOSED for Inventory

July 1—Canada Day, Bio-Ag CLOSED

July 8—Customer Appreciation Day—join us for beef on a bun, door prizes and supplier information booths

August 3—Civic Holiday—Bio-Ag CLOSED



**Order
Early &
Save**

BIO-AG

KELP FERTILIZER MIX

Organic Ingredients:

Kelp Meal
Humates
Raw Sugar

Last Day to Order:

April 30th

Directions for Use:

Apply at time of planting
at the rate of 15 lb/acre
(3.67 acres per 25 kg bag)

Other:

- clean out insecticide
hoppers every night
- keep bags closed—
this product is hydro-
scopic in nature
- make sure your insecti-
cide hoppers are
properly calibrated
when applying the
product (each make/
brand must be cali-
brated differently)
- Fill hoppers 1/2 full,
setting for opening at
bottom should be wide
open

Research done in the 1960s at Iowa State demonstrated the use of this fertilizer applied in the row at time of planting was found to be very effective in controlling corn rootworm. Many of our farmers are also finding that the Brix readings in their corn plants are much higher and as a result are feeling that their corn will withstand cooler weather and even the occasional drop below freezing. As long as the sugars are high enough, the plant will not necessarily freeze at 30° to 32°F (-1° to 0°C) and will probably withstand some of the cooler temperatures.

If a corn crop is following another row crop (i.e. corn, soybeans, etc.) then the application of the Kelp Fertilizer Mix is advised. If however, a planting of corn follows a year of plow down sod (i.e. hay) then it is not necessary to apply the Kelp Fertilizer Mix for that year.

Prices (Effective until March 31, 2009) + Taxes

# of Bags (25 kg)	Price	Cost/acre
1-10	\$50.75	\$13.84
11-20	\$50.25	\$13.70
21-39	\$49.75	\$13.57
40+	\$49.20	\$13.42

****Last date to order is April 30**

****Preauthorized Returns Only—no later than June 1. Bags must be clean and in good condition. Restocking fee of 10% after 30 days. Cannot be returned if stored in a barn.**

Approved for Organic Use

Call your local dealer or head office to order 1-800-363-5278



Nutrient Management and Pest Control Assistance for Soil & Garden Health

Soil Amendments:

Acadian Soluble Seaweed Extract (1-1-17)—a natural, non-polluting seed soak prior to planting or as a foliar spray, increasing nutritive value of crop, reducing insect damage and helps prevent fungal diseases.

Acadian Liquid Seaweed Concentrate (0-0-5)—a natural, non-polluting foliar spray, increasing nutritive value of crop, reducing insect damage and helps prevent fungal diseases.

Acadian Kelp Meal (2-1-3)—contains elements necessary for plant growth (boron, calcium and selenium) with high concentration of organic matter.

Calphos (Soft Rock Phosphate) (0-3-0)—a naturally occurring combination of phosphorus, calcium and trace minerals, used for over 40 years in some of the finest natural fertilizers. Consists of ultramicroscopic particles contributing to greater absorbance. More available than Rock Phosphate. 20% Calcium contributes to increased pH. Offers multi-year value.

Jersey Greensand (0-0-7)—an iron-potassium silicate containing natural marine potash, along with phosphorus, calcium, magnesium, manganese, boron, iron, cobalt, zinc and over 30 trace minerals. Non burning, it is a valuable asset in growing strong, hardy plants, improving colors and prolonging the bloom of both flowers and foliage plants.

Lawn & Garden (as well as the products described above):

Lawn and Garden Mix—A natural product used to energize the soil, with trace minerals to enhance soil life. A combination of Calphos (soft rock phosphate), kelp meal, carbonatite, green rock, Black Earth, boron, and gypsum. A unique fertility mix from Bio-Ag.

Feed Mother Earth Product—custom formulated from molasses, nitrogen, phosphorus, minerals, vitamins and micronutrients, to use on lawns, vegetable and flower gardens to feed the soil life.

Bug Kill—environmentally acceptable, safe to people, domestic animals and plants, biodegradable, this product will control insects in your home, on your houseplants and on your pets.

PermaGuard Diatomaceous Earth—A non-chemical insecticide, used to control pests in crops and gardens. Used as a duster, it is extremely effective against soft-bodied insects such as slugs, aphids, ants and earwigs.

