

A Keystone Bio-Ag Newsletter

SEASONAL CALENDAR

JANUARY

1/13/21

Fruit and Vegetable Meeting at Martindale.

1/14/21

Dairy and Cash Crop Meeting at Martindale.

1/26/21

8AM conference call. Topic announced on hotline.

1/28/21 5% prepay program discount ends today.

FEBRUARY

2/10/21

Fruit and Vegetable Meeting at Martindale. Guest speaker: John Kempf.

2/11/21

Dairy and Cash Crop Meeting at Martindale. Guest speaker: John Kempf.

2/20/21

Deadline for ordering Garden Package Special.

2/23/2021 8AM conference call. Topic announced on hotline.

MARCH

3/23/2021 8AM conference call. Topic announced on hotline.

KBA UPDATE

GENERAT

Grow Vigorously & Prosper

KEYSTONE BIO-AG

Welcome. A hearty thank you to all customers big and small and in-between; we appreciate your business, your loyalty and confidence in the time and energy we spent behind the scenes to bring you good information and unique products that you can use to continually improve your operation.

Success for one person often has a different meaning than for someone else, so wherever you are on the path to regenerating your farm or garden, whether just getting started because you are frustrated with high nitrogen and chemical use, or have been paying attention to the life in your soil, it is important that we know what your goals are for this season.

So don't be shy about telling us and then questioning why we recommend what we do; our goal is to be transparent and not just sell you a bill of goods.

With that, I also want to mention here that there are a few products we got hit with a significant price increase: the Tainio line and also the alfalfa seed, which moved to the next generation – WinterKing IV. Our prepay discount from our supplier got dropped, so will cost more. Apparently Covid also affected organic molasses production or demand, because all products with it in really went up. AEA absorbed some of the increase, and so did we, but it's still a spike. The good news is dry fertilizers are stable and the Aquamonics keep getting better and cheaper.



Join Live: 712-432-8773 Conference ID: 53978663

For recordings, dial 712-732-8774. Enter Conference ID: 53978663 Sharing ID 2020 gives info and list of recordings.



NOTICE!!!!!

Volume: 4 / January 2021

We need more help around here: in the office to keep paperwork straight like deliveries and shipping, filing soil tests, water tests, and sap tests, helping walk-in customers, doing some ordering and billing, also must be capable of loading and unloading trucks. We're looking for someone that enjoys paying attention to detail & is service oriented.

If you think you would enjoy this opportunity, call me.

Samuel L. Jook

Join us for a day of learning Winter Seminars

Practical management practices for the production of high quality, high yielding crops.

January 13 - Fruit and Vegetables

Speakers: Sam Zook, Common Root Farm, **Melvin Fisher**

- Winter planning and financial management tools.
- No-till and minimal-till vegetable production practices.
- · Common-sense soil balancing.
- · Impact of soil structure and how to influence it.
- Recognizing limiting factors of yield and quality.
- How to increase brix/carbohydrate levels.
- Measuring and managing plant nutrition.
- · Identifying visual nutrient deficiencies.
- Earning the right to stop chemical applications.

January 14 - Dairy and Cash Crop

Speakers: Sam Zook, Silvia Abel-Caines,

- **Alvin Peachey**
- The impact of water quality on dairy performance.
- The influence of manure quality on crops.
- Growing high quality forages.
- · Dairy nutrition.
- How to become the low-cost producer.
- Tracking tools for analyzing your dairy.
- Reviewing dairy numbers.
- Panel discussion 4 farmers.

Join us as our guest speakers and consulting team discuss the basics of soil, plant, & animal health, + economics! Bring a question – take home an answer.

Pre-registration requested by January 8 @ 4 pm.

Give name, address, number of people, and which day you'll attend. \$20 per person/day if pre-registered. Pay at door.

HOT WATER TREATING SEEDS - TEMPERATURES AND TIME LENGTH CHART

For more information on seed treating, listen to hotline topic with sharing ID: 20201207

Crop	Temp	Time	Crop	Temp	Time
Brussels Sprouts	122 ⁰	25 min.	Onion Sets	115 ⁰	60 mir
Broccoli	122 ⁰	20 min.	Parsley	122 ⁰	30 mir
Cabbage	122 ⁰	25 min.	Peppers	125 ⁰	30 mir
Carrots	122 ⁰	20 min.	Radishes	122 ⁰	15 mir
Cauliflower	122 ⁰	20 min.	Rutabaga	122 ⁰	20 mir
Celery/Celeriac	118 ⁰	30 min.	Shallots	115°	60 mir
Chinese Cabbage	122 ⁰	20 min.	Spinach	122 ⁰	25 mir
Collards	122 ⁰	20 min.	Sweet Potato Root	115°	65 mir
Cucumber	122 ⁰	20 min.	Sweet Potato	120 ⁰	10 mir
Eggplant	122 ⁰	25 min.	cuttings	120	
Kale	122 ⁰	20 min.	Tomatoes	122 ⁰	25 mir
Kohlrabi	122 ⁰	20 min.	Turnips	122 ⁰	20 mir
Lettuce	118 ⁰	30 min.			



Sous Vide Pod photo

GROWING TIPS

iii ROW CROPS

Evaluate how your year was. Identify areas needing improvements, then discuss these challenges with your consultant. Inventory and record sheets should be filled out yearly.

DAIRY

Dairy cows not performing? Take a complete water test, then evaluate your water, soil, and forage tests to get an overall picture of what is going on. Order Winter King Alfalfa Seeds now they are in short supply.



Consider hot-water treating your seeds to reduce or eliminate seed borne diseases such as black rot. While healthy plants will resist diseases, hot water treatment can give you a head start.



Are you struggling with fireblight? Call to discuss natural treatments that work! We can also help with fruit quality challenges. Ask about organic programs.



Test your water – high nitrates make for spindly transplants. Order Keystone Greenhouse Media for starting healthy robust plants that don't need to be fed until after transplanting.



In February, we will be offering our annual Garden Package Special again, at a discount. Watch for a postcard.

For information or registration CALL 717-354-2115

by Friday 1/08/21 @ 4pm. Lunch will be provided. We will be updating our *hotline if for some reason*

20 min.

with this meeting as planned. For hotline, dial

712-432-8774.

JANUARY 13

(Register @ 8:30)

(Register @ 8:30)

Martindale Reception

\$25 per person/day

352 Martindale Rd, Ephrata

Save \$5.00 if pre-registered

we are unable to continue

JANUARY 14

Dairy and Cash Crop

9:00 to 3:00

Meeting

Location:

Center

(ages 12+)

9:00 to 2:30

Fruit and Vegetable Meeting

Conference ID: 43017557

John Kempf meetings are February 10 and 11, 2021.



HARVESTING HIGH QUALITY FORAGES

Cows produce milk and gain weight more efficiently on digestible fibers and sugars than any other component reported on a forage analysis.

The important numbers for fiber reporting are: NDFD 30hr which should be 50%+; uNDFD240om which should be 15% or less; and TTNDFD which should be above 50+.

The important numbers for sugars are: simple sugars (ESC &WSC) which should be 8+; and Non Fiber Carbohydrates (NFC) which should be 28+.

Fibers will affect RFQ, which, in forages for lactating cows, I like to see 180+, ideally over 200. Sugars will affect RFV which I like to see fairly similar to RFQ.

So the conversation we need to have is; "What impacts can we as farmers make on achieving some of these targets?"

1. Obviously, we need to start with the right forage species; grasses genetically will be higher in digestible fibers than most alfalfa varieties, so for forage harvesting acres an alfalfa/grass/ clover mix gives you the balance needed. I like Winter King Alfalfa, 3-5 lbs. per acre of a grass mix (I prefer King's Alfamate or Greenfast), and 2 lbs. per acre of their 3 way clover blend.

2. Sunshine plays a big role in sugar production, which we obviously can't do without. Moisture is critical, but my preference would be slightly on the drier side; it never fails that the forage quality is higher in drier years.

3. Fertility: if you have a huge imbalance of potassium and calcium on your soil test, you will get very aggressive vegetative growth coming from potassium, which will result in low digestible fibers. You want your growth to be coming from available calcium. Lime, unless you have a soil pH under 6.1, is the biggest detriment to growing high-quality forages. If potassium is high, quit applying manure or other potassium sources. If it is low, apply pack manure or 4k gallon liquid manure. Boron is the next critical mineral; since it is an anion, it leaches. Therefore it needs be applied every year at the rate of 3-6 lbs. actual boron. Boron improves the absorption of all other minerals, especially calcium and phosphorus. Boron will aid in leaf hopper and weevil resistance.

Ask your KBA rep for specific recommendations, but as a general starting point, use 200 lbs. Super Sequence, 200-500 lb. gypsum, and 30-60 lbs. of 10% boron, per acre.

4. Management: I saved the most important one for last. So the common theory is 26-30 day cutting intervals. That is the biggest mistake we farmers have been taught.

Let's take an alfalfa plant for example: as long as that plant is growing and building plant biomass, it is gaining fibers/ digestible fibers, proteins, sugars, etc. When that plant reaches its peak maturity, meaning starting to bloom, it will start shifting things around. Now it will start becoming more lignified, digestibility will drop, ADF & NDF will go up, etc. So where is the sweet spot? For alfalfa its at 10% bloom, or 32-35 days, depending on temperature and day length. For grasses, it's when you start seeing the first seed heads emerging.

When harvesting the hay as baleage, 30-40% moisture is the way to retain the most value. Wait to mow till mid-morning so the sugars have some time to get in the plant, then use the tedder a few hours behind the mower. Then if the goal is hay-in-a-day, rake in mid-afternoon and bale in the evening. Hay-in-a-day, I found, works for most cuttings except first cutting. In 2020, we had multiple cuttings that we had 28-35% moisture. That kind of forage is hard to beat!

Keep thinking. Keep planning, and then work your plans – it's a shortcut to success.

Hope you are enjoying the New Year! And I look forward to seeing you at our winter meetings!

ALVIN PEACHEY

New Feature!

Do you like our free Weekly Hotline but wish to receive the information on paper for easy reference?

Subscribe to Hotline by Mail.

Quarterly Subscription...13 issues\$39.00 Yearly Subscription.....52 issues\$104.00 Send payment to Keystone Bio-Ag. LLC.

Hotline Recording List

Available by dialing 712-432-8774, using Conference ID 43017557, and Access Code 2020.

Conference Recording List

Available by dialing 712-432-8774, using Converence ID 53978663, and Access Code 2020.

Next Conference Call:

Tuesday, January 26 @ 8AM. See page 1.

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Our mission is to educate, encourage, and empower farmers





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