

Alternative Crop Field Day

Buck Farms

Mapleton, ME

August 15, 2019 – 9:00 am

The Maine Potato Board and Buck Farms will be hosting a field day focusing on Alternative Crop Production on Thursday, August 15 at 9:00 am.

Guest speakers Martin Hochhalter from Meridian Seeds and Burton Johnson from North Dakota State University will join us to present on pulse and oilseed crop production practices and the benefits these crops can bring to potato rotations.

Field tours and discussions will focus on the following crops:

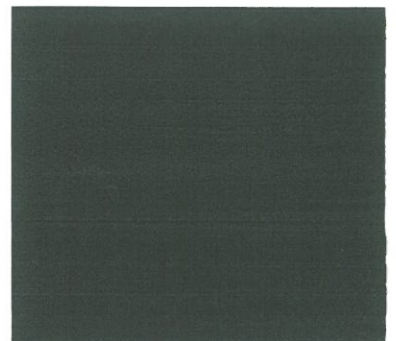
Sunflowers
Canola
Mustard
Field Peas
Malting Barley Varieties
Oat Varieties

Please RSVP to Jake Dyer by phone (207)-769-5061 or email: jdyer@mainepotatoes.com by August 9th.

Lunch will be provided.



This event is sponsored by Northeast SARE
and The Maine Potato Board



Speaker Information

Martin Hochhalter

Martin is the Product Development Manager for Meridian Seeds, LLC., based out of Mapleton, North Dakota. Meridian Seeds operates in 13 states and has over 80 associates, many of whom are professional seed growers or retail outlets. In his role with Meridian Seeds, Martin provide technical agronomic support for our sales staff and grower network.

In addition, he evaluates new crop types and varieties for inclusion in our portfolio. Meridian Seeds currently markets field peas, chickpeas, dry bean, flax, hard red spring wheat, hard red winter wheat, oat, barley, canola, and flax varieties.

Prior to joining Meridian Seeds, Martin worked with North Dakota State University for 16 years as an Assistant Breeder working on barley breeding and genetics with Dr. Richard Horsley. His degrees include a Masters of Science degree from North Dakota State University in Plant Sciences and Bachelor of Science degrees in Plant Industries Management – Agronomy and Plant Industries Management – Horticulture from the University of Minnesota, Crookston.

Burton Johnson

Burton is a Professor of Sunflower, Minor, and New Crop Production at North Dakota State University. Recent research is focused on Sunflower seed physiological maturity determination to aid in timing of harvest aids and desiccant, canola seeding date effects on crop performance, soybean plant cutoff effects on crop recovery, and screening winter canola and winter camelina for regional adaptation. The benefits of this research will enable earlier sunflower harvest, possibly extend the insurance final cutoff canola planting date, update current soybean hail loss charts for our region, and identify a potential new winter annual regional crop.

Burton's degrees include a PhD from North Dakota State University in Plant Sciences, a Masters of Science from North Dakota State University in Plant Sciences, and a Bachelor of Science in Biology from Moorhead State University in Minnesota.

University of Maine Cooperative Extension

Ellen Mallory and Tom Molloy from the University of Maine Cooperative Extension will be providing updates on the Eastern Spring Malting Barley Nursery Project (ESMBN), which is in its 5th year of variety evaluation. Maine hosts 2 trials annually; one at the University of Maine's Rogers Farm in Old Town and one in Aroostook County. In addition to the ESMBN, they will discuss the oat variety trial in which 30 cultivars are being evaluated.

Buck Farms

Jake Buck of Buck Farms and the Maine Malt House will highlight a Northeast SARE funded farmer grant, "Evaluating Alternative Malting Barley Varieties and their Acceptance in the Northeast Craft Brewing Community". This project will follow 3 malting barley varieties from the field through the brewing process to gauge acceptance of different malt varieties in the marketplace.

Maine Potato Board

Jake Dyer of the Maine Potato Board will highlight the 2 year Northeast SARE funded Research and Education grant, "Developing Best Management Practices for Pulse and Oilseed Crops in the Northeast". This project is in its second year of replicated plot and field scale trials of a variety of pulse and oilseed crops in an effort to define best management practices for producing these crops in the Northeast.

AGENDA

- 9:00 - 9:30: Sign In
Welcome
Overview of SARE LNE 17-358 Project
Introduction of Speakers
- 9:30 – 10:00 Field Pea Production Basics – Martin Hochhalter
Boone Road
- 10:00 – 10:30 Canola Production Basics – Burton Johnson
Main Street, Castle Hill/Mapleton
- 10:30 – 11:00 Mustard Production Basics – Burton Johnson
Hoffses Farm, Castle Hill
- 11:00 – 11:30 Sunflower Production Basics – Burton Johnson
Grendell Road
- 11:30 – 12:45 Lunch @ Maine Malt House
- 12:45 – 1:15 Pulse Crop Plot Tour – Jake Dyer
Pulse Crop Variety Selection – Martin Hochhalter
- 1:15 – 1:45 Malting Barley and Oat Variety Trials – Ellen Mallory
- 1:45 – 2:00 Buck Farms Malting Barley Variety Trial – Jake Buck

AAC Lacombe Yellow Field Pea

Seed Source: Eastern Grains Inc.

Seed Germination: 99%

Seeds per Pound: 1544

Target Plants per Square Foot: 9

Target Seeding Rate: 285 Lbs/Acre

Planting Date: June 07, 2019

Fertilizer: None

Herbicide: Dual II Magnum (s-metolachlor) @ 1.67 Pints/Acre

Spartan 4F (sulfentrazone) @ 6 Ounces/Acre

Seed Inoculant: Peat based *Rhizobium leguminosarum biovar viceae* @
10 Ounces/CWT

DG 540G Canola

Seed Source: DynaGro – Nutrien Ag

Seed Germination: 90%

Seeds per Pound: 78,203

Target Plants per Square Foot: 11

Target Seeding Rate: 7 Lbs/Acre

Actual Plants per Square Foot: 8.3

% Loss: 27%

Planting Date: May 13, 2019

Fertilizer: 350 Lbs/A 22-0-13-1.2Mg-1.9Ca-2.5S (77-0-45.5-4.2Mg-6.7Ca-8.8S)

Herbicide: Glyphosate

Herbicide Date: June 15

Fungicide: Quash (Metconazole) @ 4 Ounces/Acre

Fungicide Date: July 13

Adagio Yellow Mustard

Seed Source: Sundwall Seed Services, Govan, SK

Seed Germination: 96%

Seeds per Pound: 85,583

Target Plants per Square Foot: 7

Target Seeding Rate: 7.5 Lbs/Acre

Actual Plants per Square Foot: 5.7

Actual Seeding Rate: 6.1 Lbs/Acre

Planting Date: June 06, 2019

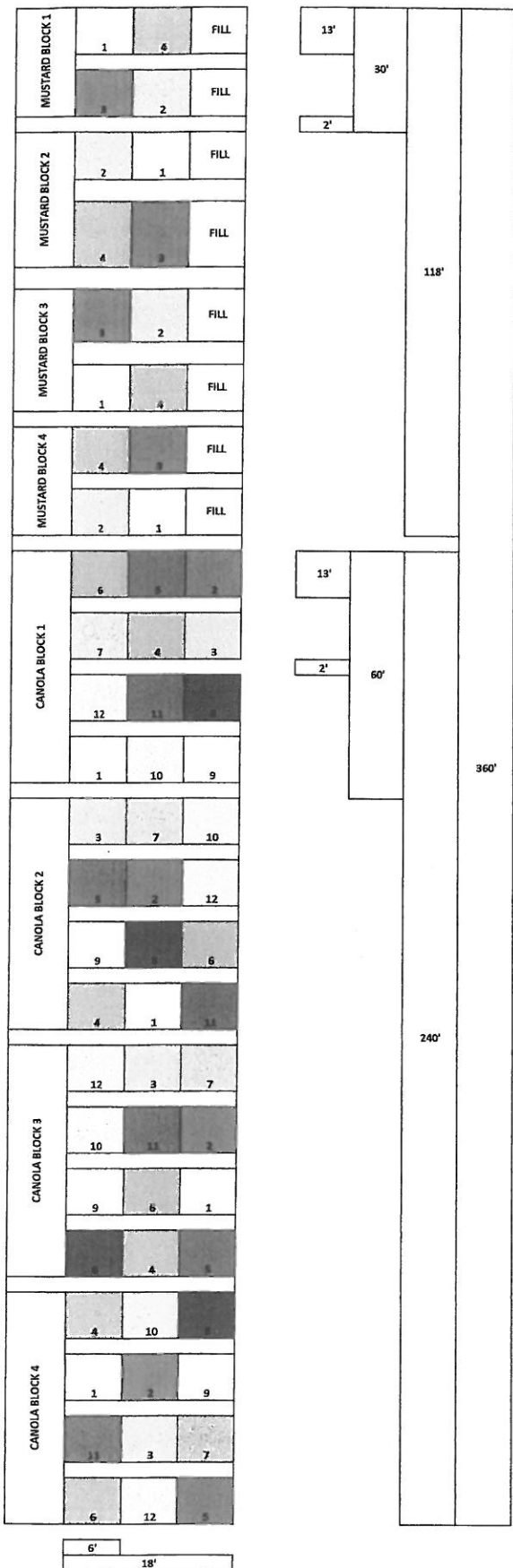
Fertilizer: 400 Lbs/A 19-0-19-1.1Mg-4S (76-0-76-4.4Mg-16S)

Herbicide: Triflurex HFP (Trifluralin) @ 1.5 Pint/A

Herbicide Date: June 05, 2019

Fungicide: Proline 480 SC (Prothioconazole) @ 5.7 Ounces/Acre

Fugicide Date: July 18, 2019



KEY

1	Adagio
2	Andante
3	Vulcan
4	Centennial

Planting Date: June 06
 Pre-Emergence Herbicide Date - June 05
 1.5 Pint/Acre Triflurex HFP - incorporated 2X
 Fertilized June 13 as topdress
 400 #/A 19-0-19-1.1Mg-4S (76-0-76-4.4Mg-16S
 ide - July 18 - Proline 480 SC (Prothiocoazole) @ 5.7 c

MUSTARD - Target Plant Stand = 9 Plants/Ft²
CANOLA - Target Plant Stands = 7, 9, and 11 Plants/Ft²

Key

1	DG 533G @ 7
2	DG 533G @ 9
3	DG 533G @ 11
4	DG 540G @ 7
5	DG 540G @ 9
6	DG 540G @ 11
7	CL 970 @ 7
8	CL 970 @ 9
9	CL 970 @ 11
10	CL 955 @ 7
11	CL 955 @ 9
12	CL 955 @ 11

Sunflower

Varieties Grown: Croplan 7111CL and 549CL

Seed Germination: 90%

Target Population: 30,000 Plants/Acre

Actual Population: Tilled – 33,652 / No-Tilled – 31,575

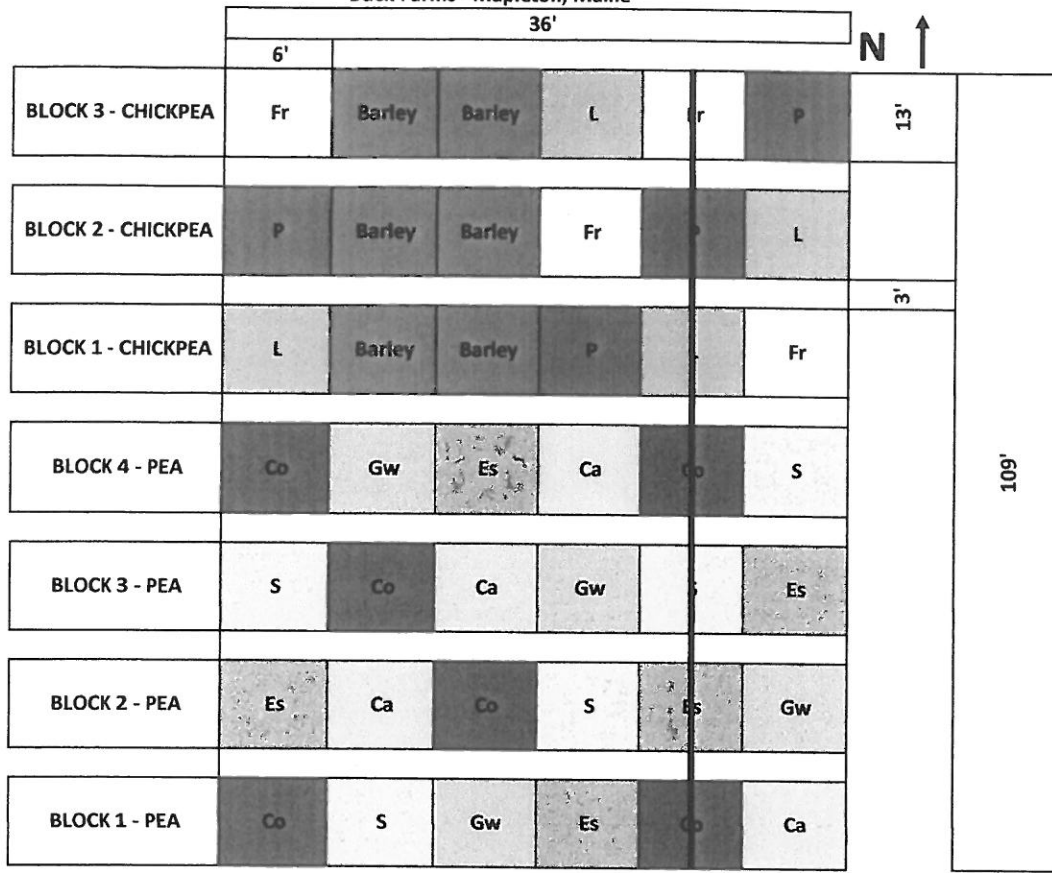
Planting Date: June 07, 2019

Fertilizer: 315 Lbs/Acre 19-0-19-1.1Mg-4S (60-0-60-3.5Mg-12.6S) - AP
100 Lbs/Acre 19-0-19-1.1Mg-4S (19-0-19-1.1Mg-4S) – TD

Herbicide: Tilled – Dual II Magnum (metolachlor) @ 1.67 Pints/Acre
Spartan 4F (sulfentrazone) @ 6 Ounces/Acre

No-Tilled – Glyphosate (pre-plant)
Beyond (imazamox) @ 6 Ounces/Acre

Pulse Crop Trial
Buck Farms - Mapleton, Maine



Key
Chickpea
CDC Frontier
CDC Leader
CDC Palmer
Yellow Pea
AAC Carver
AC Earlystar
CDC Saffron
Green Pea
AAC Comfort
CDC Greenwater

Planting Date: May 29, 2019
 Herbicide Date: May 30, 2019
 Dual II Magnum (s-metolachlor) @ 1.67 Pints/Acre + Spartan 4F (sulfentrazone) @ 6 Oz/Acre