NYS PROCESSING VEGETABLE RESEARCH 2013

Presentation For the Delaware Vegetable Conference

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NYSAES - Cornell University

Brief History NY Processing

Brief Overview of 2013 Processing Variety Trials

1. English Pea (2009)
2. Snap Bean (1988)
3. Sweet Corn (1986)

Questions at any time

Bonduelle

Seneca Foods

Art Wolcott (1949)

Seneca Foods

Snap Beans, Beets, Carrots, Kraut

Sweet corn with Green Giant for a few years

History NY

Bonduelle (2012)

Allens (2009 – Pro Fac done)

Birdseye (2002)

Agrilink (1994)

Curtice Burns (Pro Fac – 1961)

New York Vegetable Industry Quick View - 2012

National Level

- 5th – Fresh Market # of Acres
- 5th – Value

- 7th – Processing # of Acres
- 6th - Value

NY Processor and Growers Raise About $140,000 each year for Research

Overview NY

Peas – acreage 8-9000 acres

overall - sl below ave.

Early peas good

Late peas drowned

Overview NY

Snap Beans – 13500 acres

overall - ave. yields

Didn’t quite make pack

Water Issues

Virus

Overview NY

Sweet corn – 7000 acres

overall ave. yields

Not Quite Pack

Planting problems water and frost

Good Harvest Conditions

Variety Trial Program

- What is important for the crop
- Priority of criteria – Yield
- Market – Canned, Frozen…..
- Season – early peas, beans and corn - different adv. and disadv.
- Type – su corn and ss corn, large sieve beans and whole beans

Step One Pea, Bean and Sweet Corn Variety Trials

- Meet with the processors to discuss what entries they would like to see
- Send this list to seed companies
- Plot maps and packet seed for planting

Pea Variety Trial

2013 Pea Cultivar Trial

- 59 Cultivars - 1155 to 1650 heat units
- Seed Companies – Brotherton, Crites, GV, Pure Line and Seminis

Pea Procedure

- Target planting date end of April
- 400 lbs 8-14-21 per acre
- Planter - Modified Hege 80
- Plot size 7 row by 30 feet
- Shoot for 550,000 seeds per acre

Pea Procedure Continued

- Randomized split block design
- Hand harvest (every day), machine shell, grade
- Model TG4EI Integrating Texture Gage (Tenderometer - Maturity)
- Process

22. PLS M-14

BSC5641

Root Rot

Pea Sheller

Grade

Reading Tenderometer

igloo

Questions on Peas????

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Reports in back.

On to Snap Beans

Large sieve, 3-4 sieve, whole, wax and Romano

2013 Snap Bean Processing Cultivar Trials

Large Bean (22), 3-4 Sieve Bean (39), Whole Bean (10), Romano (3), Wax (3)

Seed Companies – A&C, Brotherton, Crites, Harris Moran, Pure Line, Seminis, Syngenta, Vilmorin

Snap Bean Procedure

Target planting date later May and 10 days apart from there.

350 lbs 10-5-10 with Mn and Zn P/A

Planter - Two Row Monosem

Plot size 1 row by 35 feet

Shoot for 110,000 seeds per acre

Snap Bean Procedure

Randomized split block design

Hand harvest and grade

Seed Size for Maturity Index

Process

MONOSEM
MONOSEM
MONOSEM
NG
Plus
MONOSEM
NG
Plus
540

Snap Bean Harvest

First harvest a day or two early

Harvest five feet per replication (every two days)

Seed size and yield curve

Field evaluation (plant habit …)

107
106

112
113
114

Chisholm
INCHES
1
4
5
6
7

Dulcina
Brotherton
Roma II
Pure line
Poseidon
Crites
Ribera
Seminis
Furano
Rogers
Navarro
HM

Virus

Questions on Beans????

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Reports in back.

On to Sweet Corn

Sweet Corn Procedure

Esu – 5/10, Msu about 5/25 and SS about 6/10.

350 lbs 10-5-10 with Mn and Zn P/A
100 lbs of N sidedressed

Planter - Two Row Monosem

Plot size 2 rows by 40 feet

Shoot for 20,000 seeds per acre

Sweet Corn Procedure

Randomized split block design

Hand harvest and evaluation

Moisture for Maturity Index

Process

2013 Cultivar Trials

Sweet Corn

20 su types

29 yellow supersweets

2 bicolor supersweets

3 white supersweet

Sweet Corn Harvest

Su maturity about 72-75% moisture

SS maturity about 75-78% moisture

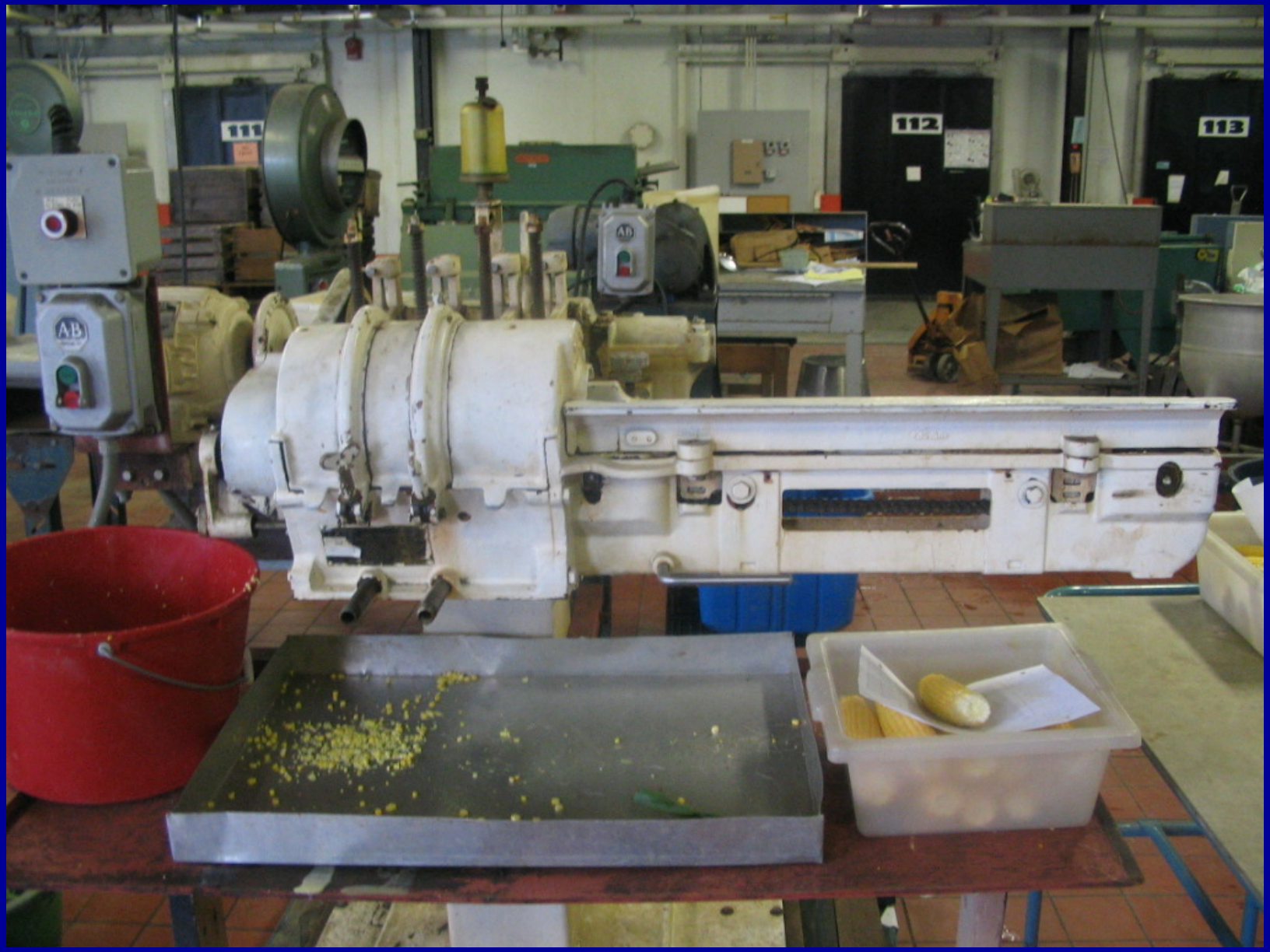
2 rows by 15 ft (single harvest – 4 reps)

15 ear subsample back to Raw Products for ear data

Field plant data

CENTIMETERS
Owatonna
20

Corn Cutter



Process

Northern Corn Leaf Blight

Common Smut

ZAREBA
SO
POWERED
10 Miles

????’s on Sweet Corn

Reports in the back of the room.

Field Day

Demonstration plots of all corn and beans in variety trials along with information on pea variety trial.

Cosmos
BSC898
HMX0106
HMX0105
Stera

Siera
(HMX7115)

Cutting in November

Frozen peas

Canned and Frozen large sieve, 3-4 and Romano beans; frozen whole beans.

Frozen cob and cut kernel sweet corn (both su and ss types)

113

Table 1
Early Peas
E1
E2
E3
E4
E5
E6

4 Sieve
1-7
FROZEN

Snap Bean
Field ~ Day

ACKNOWLEDGEMENTS

Funding
PARTICIPATING SEED COMPANIES

NYS VEG. RESEARCH ASSOCIATION

ONTARIO PROCESSING VEGETABLE GROWERS

ONTARIO FOOD PROCESSORS ASSOCIATION

Acknowledgements

Russ Harris, Wilma Kean, Gib Scott, Paula Fox, Mary Lou Hessney, Sean Murphy, Andy TenEyck, Nick Luango, Jake Legott, and Anne Wiltsey

Washington DC

Thank You!