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1-2021

2021 Update Mtg: Evaluation of New Hybrid Varieties with Improved Disease Resistance, Fruit Quality and Yield

Giverson Mupambi

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Evaluation of new hybrid varieties with improved disease resistance, fruit quality and yield



Giverson Mupambi,

UMass Cranberry Management Update, January 27, 2021

UMass
Cranberry
Station
Research
& Extension



Motivation

- Increase the profitability and sustainability of the MA cranberry industry
- Performance data to be collected under MA growing conditions
- Aid decision making decision processes e.g. when applying for Cranberry Bog Renovation Grant Program

Project goals

1. Ease of establishment, time to full productivity and yield

- ✓ Characterize ease of establishment for new hybrids under MA growing conditions
- ✓ Assess bloom phenology, time to the reach full productivity and yield potential

2. Fruit quality

- ✓ Evaluate fruit quality in (fruit color, fruit firmness, internal quality, berry size, storage potential)

3. Disease management (Leela Uppala)

- ✓ Document fruit rot resistance and susceptibility
- ✓ Document the incidence (if any) of other diseases such as phytophthora root rot and upright dieback on new cultivars

4. Weed management (Hilary Sandler and Katie Ghantous)

- ✓ Document the susceptibility of to damage from herbicides currently used in MA
- ✓ Evaluate the ability to outcompete weed species that are predominant in newly renovated cranberry bogs in MA

Project goals

5. Insect management and pollination (Anne Averill)

- ✓ Document susceptibility to insect pests and attractiveness to pollinators

6. Frost tolerance (Peter Jeranyama)

- ✓ Document the frost tolerance and classify them accordingly

- 5 varieties
- Disease resistance, high yielding, early ripening, good fruit color, large fruit size, lower acidity

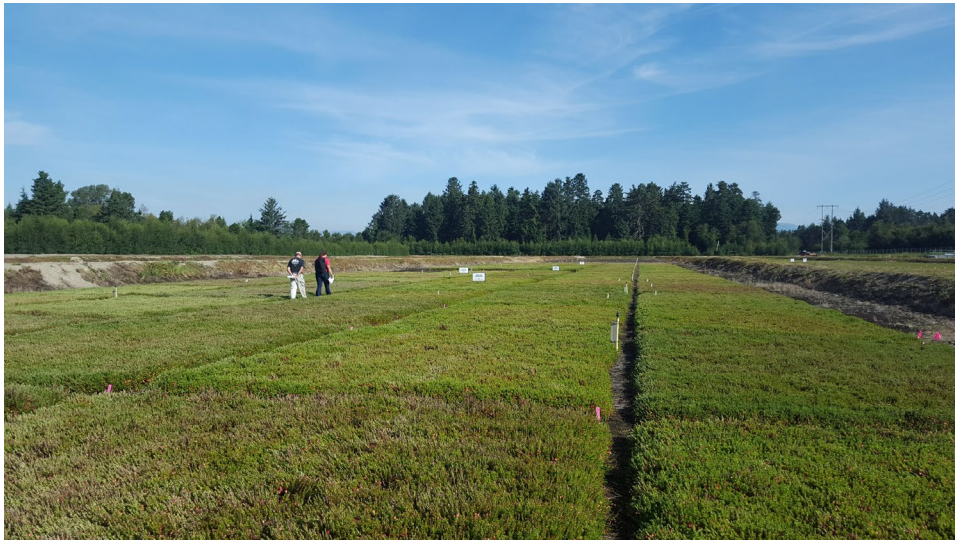


Valley Corp Varieties

- 5 varieties
- High yielding, large fruit size, good fruit color, excellent rebud and fresh fruit keeping quality



- 3 varieties
- Strong yearly growth and bud sets, high yields, large fruit quality, fertilizer tolerance, early maturity



- Keith Mann (partner farmer)
- Juan Zalapa
- Ed Grygleski, Nicole Hansen & Abbott Lee

Acknowledgments



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