



Ontario
Tender Fruit
Growers

NEW VARIETY DEVELOPMENT UPDATES



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**NEW VARIETY DEVELOPMENT WAS FUNDED THROUGH A FEDERAL
GOVERNMENT AGRISCIENCE GRANT 2018-2023
IN PARTNERSHIP WITH VINELAND RESEARCH, UNIVERSITY OF GUELPH
AND WITH ADDITIONAL MONETARY SUPPORT FROM NIAGARA
PENINSULA FRUIT AND VEGETABLE GROWERS**

New Variety Development – Tender Fruit

Ken Slingerland, Consultant

Sarah Marshall – OTFB

March 22 and 24,
2023



There's No Such Thing as a Free Meal!



Why do we Test New Selections and Varieties?

Winter Injury

Buenos I
NJF 18



New Variety Development - Peach

Dr. Neil Miles – HRIO & University of Guelph

Early Blush



- **Very, Very** Early Peach
- HD 2022 was July 12 - Vineland
- HD was July 6-9 at 2 other sites
- Reasonable size but normal for an early peach
- Good colour and blush
- Very few splits

Rising Sun



- Very Early Peach
- HD 2022 was July 16 - Vineland
- HD was July 14 in Virgil
- Good size, colour and blush
- Very few splits

New Variety Development - Peach

Veeblush



- HD is approx. July 28 at Vineland
- Around Garnet Beauty Season
- Yellow fruit with a good red blush
- Good resistance to leaf spot
- Overall good

V96141



- HD 2022 was July 31 at Vineland
- HD was July 28 at another site – lighter crop
- Colour, blush, attractiveness – very good
- Overall good

Peach - Cold Chain Testing

V96141 Compared to Garnet Beauty – Dr. Jennifer DeEll

Objective - Compared V96141 to Garnet Beauty for mealiness

Method – 3 year trial from 2019 to 2022

- Fruit was harvested from a grower site and immediately transported to Simcoe for storage
- Regular cold storage - 3 boxes at 0.5 °C and 3 boxes in 4.0 °C

Observations - Samples were analyzed at 7,13,16,20 day intervals and evaluated

Results

- Mealiness did not occur in either variety until after day 16 in storage
- Mealiness on day 20 at 0.5 °C for V96141 was 53% and Garnet Beauty was 67%
- Mealiness on day 20 at 4.0 °C for V96141 was 87% and Garnet Beauty was 81%

Conclusion - V96141 benchmarked well against Garnet Beauty

Nectarine - Cold Chain Testing

V97302 Compared to VG300– Dr. Jennifer DeEll

- Same parameters as peach for temperature and removal testing dates

2022 results

- Mealiness at 4 degrees Celsius occurred in both varieties at day 16 – V97302 (37%) and VG300 (33%)
- Mealiness did not occur in either variety at .5 degrees Celsius until day 20 – V97302 (37%) and VG300 (43%)

Overall Summary

- 2019 V97302 was evaluated alone – mealiness occurred at both temps. day 17
- 2021 V97302 had less mealiness at each removal date than VG300

New Variety Development - Peach

Dr. Jay Subramanian – University of Guelph

- Stony hard gene selections 2nd stage planting – 4 trees of each for further evaluation
- Selections ripening from end of July to end of August



New Variety Development - Apricots

May 2022, Priority – Advance promising selections in the Post Harojoy, Harostar, Haroblush season

HW460 – July 17 approximate Harvest Date, 10 years old – Dr. Dick Layne, AAFC



Apricots
still need
frost
protection



- **Ken's Ratings** - HW460 should be considered for propagation and grower trials
- A mid-season apricot and comes 7 to 10 days after Harostar and Harojoy but before HW431
- HW460 is a medium sized fruit, good eating quality and is very attractive with a good blush
- It has good resistance to Bacterial Spot every year and is a good choice for the mid to late season
- **Overall - Good**

New Variety Development - Apricots

HW431 – July 20-22 approximate Harvest Date, 20 + years old



- **Ken's Ratings** - HW431 is currently planted in 2 small grower trials
- It is mid to late season and is about 5 days after Haroblush and a 5-7 days before Harlayne
- HW431 is a large sized fruit, very good eating quality and a very high brix level
- It is very attractive with a good blush
- It has good resistance to Bacterial Spot every year and is a good choice for the mid to late season
- **Overall – Good to very good**



Fire Blight 2020



New Variety Development – Pears

0322-003 – Aug 31 approx. harvest date at Vineland, 6 years old
Dr. David Hunter, Breeder, AAFC & Ken Slingerland -Evaluations



Ken's ratings – May 2022, Priority - Advance promising selections in the Pre-Bartlett season

- Leaves emerge early in spring ahead of the other selections, good growth
- amount of bloom was poor to good at the three sites, crop was acceptable, no fire blight in the spring - just a minor amount in the summer at two of three sites,
- average fruit size, good attractive fruit with a slight red blush at two sites, flavour was good but slightly astringent, flavour improves with some storage

Rating overall – fair to good

New Variety Development – Pears

0112-13- September 7 approx. harvest date at Vineland, 6 years old



Ken's ratings – a few days before Bartlett

- Strong tree, one of the latest to bloom, fair bloom and a very light crop
- no fire blight in the spring but noticed a little in the summer
- attractive and very large fruit, firm and good flavour,

Rating overall – good

New Variety Development – Pears

0329-043 - Sept 10 at Vineland, 6 years old

Ken's ratings

- Strong growth, good bloom, good crop
- no fire blight at the three sites except some in the summer at one site
- a little pre-harvest drop, good fruit size, some red blush on fruit, good flavour
- a few “pigmy” fruit
- **Rating overall – good**





New Variety Development Tender Fruit- 2023 - 2028

- Tender Fruit will be applying for funding in the next federal framework (SCAP) to continue new variety development through Vineland , U of G and Scouting activities
- Unfortunately, funding cost share on variety development is now @ 50-50 cost share vs. the previous several frameworks which provided a 70-30 cost share.
- Cost share on carbon sequestration / reducing greenhouse gases are the only activities that are eligible for a 70-30 split
- A resolution has gone to FVGC to lobby federal government to return to the 70-30 cost share model