

# Accede 40 SG Peach Thinning Evaluation in New Jersey-2023

**Win Cowgill**  
*Professor Emeritus Rutgers University*  
*Owner Win Enterprises International., LLC.*

**Greg Clark**  
*Valent USA LLC.*

## Peaches/Nectarines

Accede® PGR is the first of its kind chemical thinner registered for use on peaches/nectarines. Trials have demonstrated that an application of Accede to peaches/nectarines during the period from bloom to petal fall will reduce fruit set and reduce, but not eliminate, the need for hand thinning.

Valent conducted grower demonstration trials in NJ in 2022 and 2023 with numerous peach growers. See our article on [Accede Peach Grower Trials in 2021 and 2023 in New Jersey](http://www.horticulturalnews.org/103-2/HN4.pdf) <http://www.horticulturalnews.org/103-2/HN4.pdf>

## 2023 Accede Peach Thinning Evaluation in North Jersey,

Two orchards were selected in Norther New Jersey, Sunhigh Orchard in Randolph, NJ (Morris County) and Melick's Town Farm, Califon, NJ (Hunterdon County). The goal was to evaluate Accede on a number of peach varieties for efficacy, 8 were done, 4 at each location. We know there are varietal differences on how Accede performs as a peach blossom thinner.

The experiment was set up with single tree replications in a completely randomized design. All treatments were applied with a Rears Nursery Cart Sprayer (Photo 2) with a handgun (Photo 3), at 100 PSI at 100 GPA. Treatments were applied full bloom, (Photo 1).

The effects of the treatment can start to be seen one week after application (photo 4) but it really takes until

pit hardening to determine the percent of fruit that was removed. Trees were evaluated at shuck split and at pit hardening. Data was collected at first harvest, ½ bushel of peaches per tree per tree/replication were harvested, 15 of these were selected for uniformity and data collected, weight and diameter (Photos 5,6).



Photo 1. Applications conducted at full bloom.

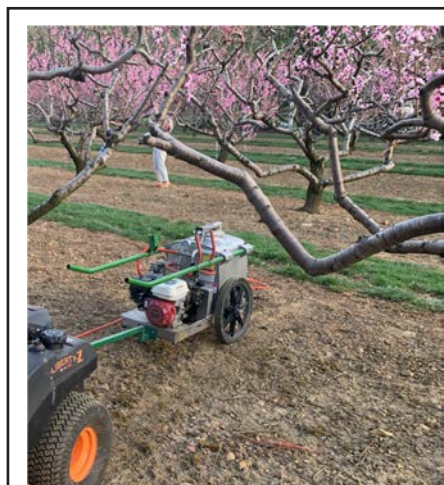
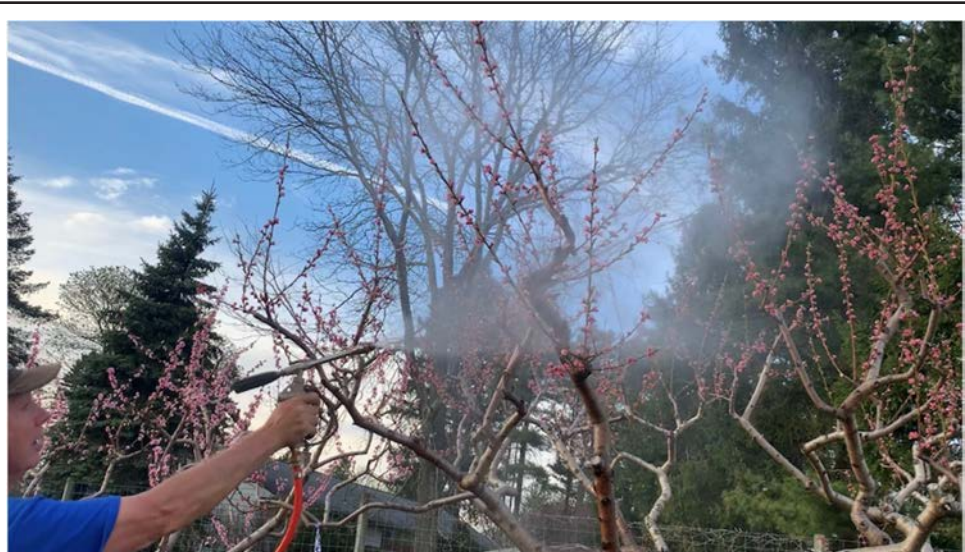


Photo 2. Rears Nursery Cart Sprayer.

## Results and Discussion

Accede Thinner worked well across the board on all cultivars tested. Both farms averaged 50% blossom thinning, 4 % increase in diameter and 16 % increase in weight/mass. Hand thinning still needed to be done for touch up. Thinning ranged from 32% to 73% with Gloria. In my mind Gloria over thinned with Accede in this experiment. Our target is 40-60% thinning (Figures 1-4).

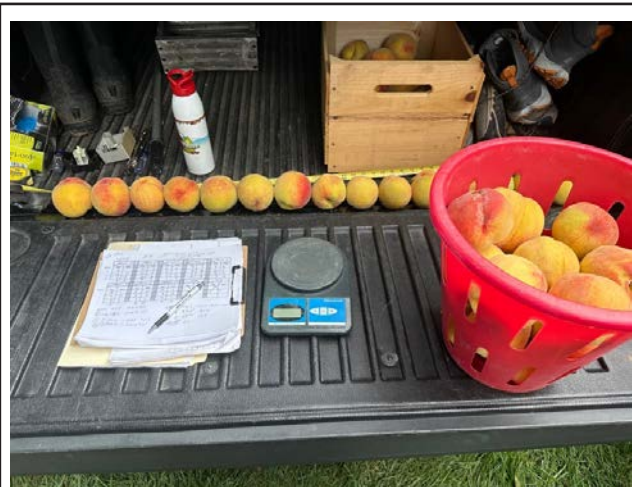
We used the low rate of Accede, 300PPM and a higher rate of surfactant 0.1% v/v or 16 ounces/100. The surfactant was Regulaid which is a NIS penetrating



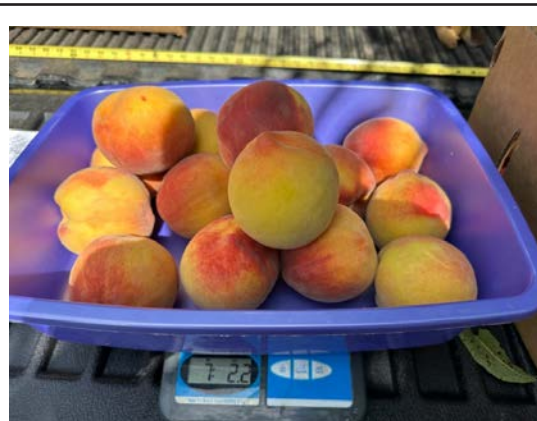
**Photo 3.** Hand Gun Application of Accede @ 100 PSI.



**Photo 4.** Peach flowers starting to desiccate, one week after application.



**Photo 5.** Data collection at harvest, 15 peaches sampled per tree, measured for diameter.



**Photo 6.** Data Collection at harvest, 15 peaches sampled per tree, weighed on scale.

- Location: Sunhigh Orchards, Randolph, NJ
- Replications- completely randomized -4 single tree reps per treatment-
- Applied with Handgun, 100 GPA, 100 PSI
- Treatments:
  - UTC
  - ACCEDE 300 ppm + Regulaid 1 pt/100
- Timing: mid to late bloom, 4/14 (5-8PM)

**Figure 1.** 2023 Sunhigh Data.

Sunhigh Orch.			
Variety	% thinning	% Incr dia	% Incr mass
Redhaven	48.5	-1.6	8.2
Ernies Choice	60.2	-0.6	19.6
Loring	47.1	5.4	8.6
Jerseyglow	38.9	4.3	23.0

**Figure 2.** Sunhigh Date, Minimum Temperature, Average Temperature, Maximum Temperature, Relative Humidity (RH), and precipitation.

Date	Tmin	Tave	Tmax	Relative Humidity Avg [%]	Precip (in)
2023-04-07	39	49	54	35	0
2023-04-08	32	41	51	42	0
2023-04-09	33	44	57	50	0
2023-04-10	35	50	64	49	0
2023-04-11	44	59	72	34	0
2023-04-12	59	69	81	34	0
2023-04-13	57	72	87	41	0
2023-04-14	62	75	90	33	0
2023-04-15	58	64	71	82	1.09
2023-04-16	55	62	70	84	0
2023-04-17	51	57	63	70	0.15
2023-04-18	41	47	51	50	0
2023-04-19	39	49	62	49	0
2023-04-20	42	54	71	52	0
2023-04-21	47	57	70	65	0

surfactant and therefore a bit more active. It has been my standard for use with PGR's for over 20 years.

Applications of any PGR should be done in early morning or evening to allow for slow drying. Even though our temperatures were warm on day of application no phototoxicity was observed.

In conclusion, Accede is a unique product filling a nitsch for a chemical PRG thinner for peaches. It assists with effective Crop Load Management. The use of Accede allows for significantly less hand thinning labor,

- Location: Melick's Town Farm, Califon, NJ
- Replications- completely randomized -8 single tree reps per treatment-
- Applied with Handgun, 100 GPA, 100 PSI
- Treatments:
  - UTC
  - ACCEDE 300 ppm + Regulaid 1 pt/100
- Timing: mid to late bloom, 4/14 (2-4:30PM)

**Figure 3.** 2023 Melick's data by cultivar.

Melick Variety	% thinning	% Incr dia	% Incr mass
Gloria	73.2	8.6	23.1
Messina	42.2	5.3	13.8
Big George	62.9	2.3	11.5
Victoria	32.3	7.2	18.5

**Figure 4.** Melick's Date, Minimum Temperature, Average Temperature, Maximum Temperature, Relative Humidity (RH), and precipitation.

Date	Tmin	Tave	Tmax	RHavg	Precip
2023-04-07	39	49	54	34	0
2023-04-08	33	41	50	42	0
2023-04-09	34	44	56	50	0
2023-04-10	35	49	62	51	0
2023-04-11	43	58	70	36	0
2023-04-12	60	69	80	35	0
2023-04-13	59	72	84	40	0
2023-04-14	61	74	87	35	0
2023-04-15	58	63	70	88	0.98
2023-04-16	54	61	69	89	0
2023-04-17	50	56	62	69	0.18
2023-04-18	41	46	51	51	0
2023-04-19	37	49	62	49	0
2023-04-20	43	55	70	53	0
2023-04-21	47	57	71	70	0

the biggest cost of production in peaches. We also saw increased fruit size and therefore potential increased dollar return per acre.

I would urge all Peach Growers to try Accede for Peaches in 2024.

## Eco-Friendly Insect, Disease, Bird Control

University/USDA tested

Stink Bug Traps  
*Brown Marmorated and Native Bugs*

Insect Traps and Lures  
*Plum Curculio Trap Tree Control,  
Codling & Oriental Moth, Cranberry  
Pests, Black Stem Borer, Others*

Honey Bee Lure  
*Attract Bees - Increase Pollination*

Predalure attracts beneficials

Oriental Beetle MD  
*Mating Disruption  
Fruit Crops & Ornamentals*

Prestop  
*New Biofungicide Impressive  
Activity. Foliar/Root Diseases*

Avex  
*Bird Control. Apply by ground or  
air. Cherries, Blueberries, Sweet  
Corn, other crops*



*Committed to the Environment and Green Technology  
Since 1990*

P. 303-469-9221  
agbio@agbio-inc.com  
www.AgBio-Inc.com



# NOURSE

*Delivering Quality*

NourseFarms.com | 413-665-2658 | info@noursefarms.com



**WE DELIVER**  
high-quality plants  
so you can deliver a  
**high-quality**  
**HARVEST.**



## Improving Tree Growth

with OMEX® plant nutrition



### Cell Power® LifeOmex®

Combat seasonal stresses



### Cell Power® SizeN®

A nitrogen revolution has arrived



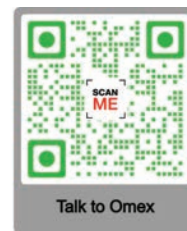
### Cell Power® Calcium Platinum & Calcium Gold

Calcium with technology to effectively integrate into the fruit



### Cell Power® Sulis

Helping to improve color and brix



Now that this year's challenging spring has had its effect, it's now time to plan ahead with how to make the most of this year's potential crop.

OMEX® Agrifluids USA knows how difficult it can be to get a crop all the way to harvest. That's why we offer tools to help.

OMEX's Cell Power® Sulis™ can help mature the crop prior to harvest. It has an affect on any crop where red coloration is critical such as in apples, grapes, and cherries. Cell Power® Sulis™ works by supplying the crop with Molybdenum- a critical nutrient in color formation. By supplying Mo close to harvest, we can avoid difficult to detect deficiencies of Mo. We can force the plant to use Mo quickly, resulting in higher levels of ABA (Absicic Acid), a critical plant hormone for color formation and ripening.

Alongside Mo, this product also includes specific cell wall protectants. These counter ethylene, enhancing the ABA effect and preventing softening of the fruit. The further inclusion of boron doubles down on sugar production

OMEX® Agrifluids USA has been working with Cell Power® Sulis™ since 2016 in the US market. "We started running trials with Sulis™ in 2016 to show earlier ripening, improved color and higher brix held up. We had already been impressed by the trial results from Britain, where this technology was developed" says OMEX® agronomist, Dean Konieczka. OMEX® has replicated those trials here in the United States by trialing this product from the east coast to the west coast in many fruit crops with some of most successful grower results being in Honey-crisp, a notably difficult to color variety.

To stimulate color and brix ahead of harvest, apply Cell Power® Sulis™ as soon as fruit starts maturation, repeating the application at 7-10 day intervals.

Learn more at [www.OMEXusa.com](http://www.OMEXusa.com) or contact your regional agronomist to learn more. The product names and brands referenced here are registered and trademarks of OMEX® Agrifluids, Inc.© OMEX® Agrifluids, Inc. 2021.

For more information Call **559-661-6138** or Visit [www.omexusa.com](http://www.omexusa.com)

✓ 45 years of improving yields



# GROWMARK FS, LLC

IN THE BUSINESS OF IMPROVING YOUR BOTTOM LINE

CROP PROTECTION

SEED

CROP NUTRIENTS



**Solu-Cal**  
Powered by **INTENSIFY Microbial BioCatalyst**

Solu-Cal has solutions for:

- Same-season soil pH adjustment
- Immediately available Calcium
- Micronutrients
- Biologicals for soil health

Easy, Effective, and Efficient  
Applications for all Crop & Turf  
Needs

**CHOOSE GROWMARK FS PRODUCTS TO  
INCREASE YIELDS AND GROW YOUR PROFITABILITY**



POWERED BY GROWMARK FS AGRONOMY

