2018 Culture Trial Results

DarwinPerennials.

PERENNIALS WITH STAYING POWER™

Trial Program Parameters

- <u>Goal:</u> Understand how new genetics in perennials can be used to schedule fresh crops for specific sales windows Spring through Fall.
- All liner inputs were from a 72 cell liner
 - 5 to 7 week URC Stick 'to ready' in elle pot
- No liners had vernalization
- All were grown outside in full sun on black plastic at our West Grove, PA location.
- No fungicides, PGRs, Florel or Configure was used in trials
- All finished containers were a 2.5qt (trade gallons)
- All containers had drip irrigation and supplemental feed via irrigation as needed
- All finished containers top dressed with Harrell's 13-5-9 slow release feed
- We included several items from our 2020 new introductions along with 2019 introductions

Features:

- Impressive flower power without vernalization
- Amazing impulse color at retail
- Cold hardy Digitalis- perfect for Northern markets (Zone 5)







Photo: wk 24 (6.15)

Photo: wk 26 (6.26) Pinched)

Photo: wk 28 (7.13)

Photo: wk 31 (8.3)



Photo: wk 33 (8.17) DarwinPerennials.

Performance Summary

- Performed well in all groups
- Recommend a pinch after transplant for optimal product form- more flower stalks at a shorter shipping height



Group	Transplant	Pinch	Ship	Weeks to Finish
1	14	none	23	9
2	17	21	25	8
3	21	23	27	6
4	24	none	31	7
5	25	none	33	8

Pinching:

- Group 1 was not pinched post transplant, while Group 2 was pinched
- No pinch results in a taller, dominant flower spike surrounded by shorter, lateral flower spikes
- A pinch results in increased branching with more flower spikes at a shorter height
- Both groups were salable, but by reducing plant height the pinch allows for more shelves per rack



Group 1- no pinch



Group 2- pinched

Pictures sized to show approximate height difference (scaled based on pot height)

Caryopteris Gold Crest



Group 4

Planted: wk 26 Photo: wk 33 (8.17.18)



Group 5 Planted: wk 28 Photo: wk 40 (10.4.18) DarwinPerennials.

Caryopteris Gold Crest

Performance Summary

- Both groups finished well
- Groups 4 and 5 were planted 2 weeks apart, but finished 1 week apart with group 4 holding a longer color window.
- Salable as a foliage color item prior to flowering
- Gold foliage that doesn't burn in full sun with purple-blue flowers in late summer to early fall
- Excellent Pollinator Plant



Group	Transplant	Pinch	Ship	Weeks to Finish
4	26	27	37	11
5	28	29	38	10



Planted 8/1/15 Photo: 6/7/17

Caryopteris Grand Bleu



Group 4 Planted: wk 26 Photo: wk 38 (9.21.18) **Group 5** Planted: wk 28 Photo: wk 40 (10.4.18)



Caryopteris Grand Bleu

Performance Summary

- Both groups finished well
- Groups 4 and 5 were planted 2 weeks apart, but finished 1 week apart with group 4 holding a longer color window.
- Compact, upright habit is great in the landscape and perfect for maximizing shipping space



Group	Transplant	Pinch	Ship	Weeks to Finish
4	26	27	37	11
5	28	29	38	10



Iberis Summer Snowdrift

Features:

- Pure white flowers have an extremely long flowering window for a longer selling season
- No vernalization needed for flowering
- High heat tolerance
- Zone 6B



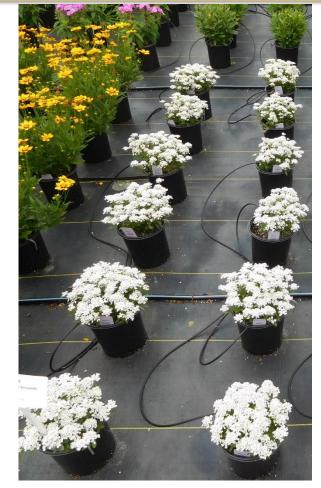


Planted August '16. Photo: June 1st 2017

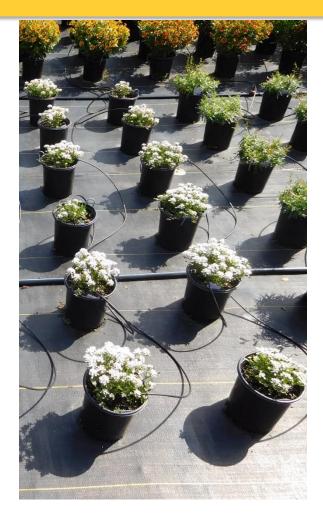
Iberis Summer Snowdrift



Group 1 Planted: wk 15 Photo: wk 24 (6.15)



Group 2 Planted: wk 20 Photo: wk 27 (7.6)



Group 3 Planted: wk 24 Photo: wk 33 (8.17) DarwinPerennials.

Iberis Summer Snowdrift Group 1



Group 1 Planted: wk 15 Photo: wk 24 (6.15.18)



Group 1 Planted: wk 15 Photo: wk 25 (6.22.18)

Iberis Summer Snowdrift Group 2



Group 2 Planted: wk 20 Photo: wk 26 (6.29.18)



Group 2 Planted: wk 20 Photo: wk 27 (7.6.18) DarwinPerennials.

Iberis Summer Snowdrift

Performance Summary

- Groups 1 and 2 had the strongest performance
- Groups 4, and 5 didn't reach full bloom potential or hold the expected flower duration



Group	Transplant	Pinch	Ship	Weeks to Finish
1	15	none	22	7
2	20	21	25	5
3	24	27	32	8
4	26	none	N/A	N/A
5	28	29	N/A	N/A

Salvia Blue By You

Features:

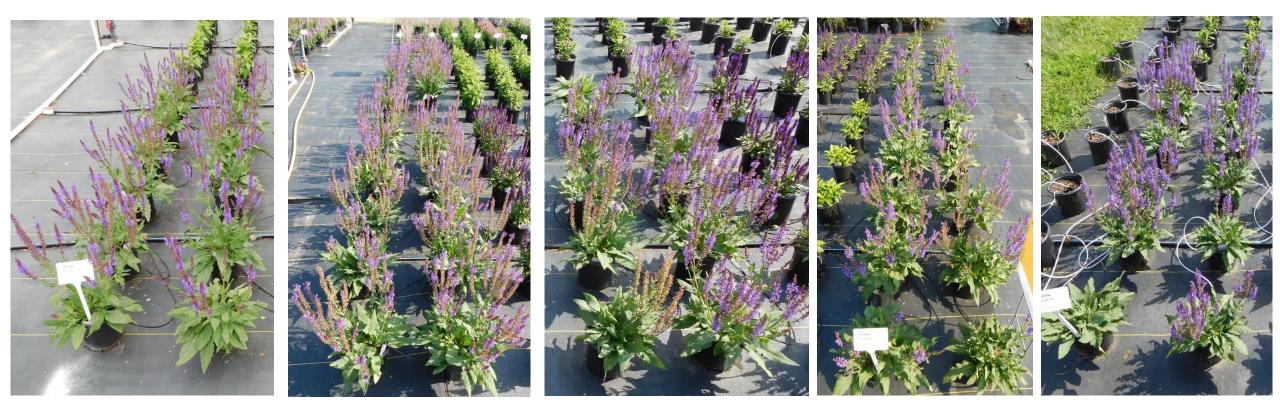
- Excellent winter hardiness and heat tolerance
- Sterile hybrid for longer shelf life
- Re-flushes very easily
- Long, bright blue flower spikes





Planted 2016 Photo: 6/7/17

Salvia Blue By You



Group 1 Planted: wk 14 Photo: wk 23 (6.8) **Group 2** Planted: wk 19 Photo: wk 26 (6.29)

Group 3 Planted: wk 23 Photo: wk 29 (7.20) **Group 4** Planted: wk 25 Photo: wk 32 (8.10) **Group 5** Planted: wk 27 Photo: wk 33 (8.17)

Salvia Blue By You

Performance Summary

• Good performance in all groups



Group	Transplant	Pinch	Ship	Weeks to Finish
1	14	none	22	8
2	19	21	25	6
3	23	24	28	5
4	25	27	32	7
5	27	none	33	6

Coreopsis Electric Sunshine



Group 1 Planted: wk 15 Photo: wk 26 (6.29.18)

Group 2 Planted: wk 20 Photo: wk 28 (7.13.18)



Coreopsis Golden Stardust



Group 1 Planted: wk 15 Photo: wk 26 (6.26.18)



Coreopsis Golden Stardust



Group 2 Planted: wk 20 Photo: wk 27 (7.6.18)



Penstemon Quartz Red



Group 1 Planted: wk 15 Photo: wk 26 (6.29.18)

Group 2 Planted: wk 20 Photo: wk 28 (7.13.18)



Helenium Salud Embers









Group 4 Planted: wk 25 Photo: wk 35 (8.30) DarwinPerennials.

Group 1 Planted: wk 14 Photo: wk 27 (7.6)

Group 2 Planted: wk 19 Photo: wk 29 (7.20)

Group 3 Planted: wk 23 Photo: wk 33 (8.17)

Helenium Salud Embers

Performance Summary

- Strongest performer of the Salud series
- Best performance in groups 2-4
- Recommend to plant after week 18- Salud is a naturally long day flowering perennial for summer



Group	Transplant	Pinch	Ship	Weeks to Finish
1	14	none	26	12
2	19	20	27	8
3	23	24	31	8
4	25	27	34	9
5	27	28	36	9

Salvia Rose Marvel



Group 1 Planted: wk 14 Photo: wk 24 (6.15.18)



Group 2 Planted: wk 19 Photo: wk 26 (6.29.18)

Salvia Rose Marvel



Group 3 Planted: wk 23 Photo: wk 29 (7.20.18)

Group 4 Planted: wk 25 Photo: wk 33 (8.17.18) Group 5 Planted: wk 27 Photo: wk 34 (8.24.18) DarwinPerennials.

Phlox Ka-Pow Lavender

Features:

- Compact, well-branched and uniform habit provides an excellent retail presentation
- Mildew tolerant
- Vibrant lavender flowers





Phlox Ka-Pow Lavender



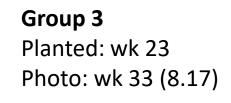


Group 2

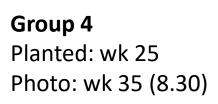
Planted: wk 19

Photo: wk 28 (7.13)

Group 1 Planted: wk 14 Photo: wk 27 (7.6)









Group 5 Planted: wk 27 Photo: wk 39 (9.28) DarwinPerennials.

Phlox Ka-Pow Lavender

Performance Summary

- Good performance in all groups
- Plant height shortens as the season progresses
- Excellent mildew resistance in all groups



Group	Transplant	Pinch	Ship	Weeks to Finish
1	14	none	25	11
2	19	20	27	8
3	23	25	32	9
4	25	27	35	10
5	27	28	38	11

Phlox Ka-Pow Pink

Features:

- Compact, well-branched and uniform habit provides an excellent retail presentation
- Mildew tolerant
- Vibrant pink flowers





Phlox Ka-Pow Pink



Group 1 Planted: wk 14 Photo: wk 27 (7.6) **Group 2** Planted: wk 19 Photo: wk 29 (7.20) **Group 3** Planted: wk 23 Photo: wk 34 (8.24)

Group 4 Planted: wk 25 Photo: wk 35 (8.30) Group 5 Planted: wk 27 Photo: wk 38 (9.21) DarwinPerennials.

Phlox Ka-Pow Performance

Performance Summary

- Good performance in all groups
- Plant height shortens as the season progresses
- Excellent mildew resistance in all groups



Group	Transplant	Pinch	Ship	Weeks to Finish
1	14	none	25	11
2	19	20	28	9
3	23	25	33	10
4	25	27	35	10
5	27	28	38	11

Veronica Forever Blue

Features:

- Produces continuous, deep blue flowers from Summer to Fall
- Excellent branching
- Larger profile than the Moody Blues



Veronica Forever Blue



Group 2 Planted: wk 20 Photo: wk 29 (7.20)



Group 3 Planted: wk 24 Photo: wk 31 (8.3)

