



# DANZIGER

## PERENNIALS

Technical Product Pages

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### 2024-2025

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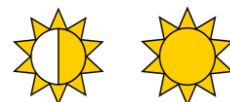
# CELESTIA™

Agastache foeniculum

New  
2025



**CELESTIA™**



- Cold Hardiness 6-10
- No vernalization or cooling required (First Year Flowering)
- Pollinator friendly
- Mature height and width is 50 cm x 46 cm (20 x 18 inches)

For additional technical growing information:

CELESTIA™ [CLICK HERE](#)



# CELESTIA™

Agastache foeniculum



New  
2025

## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
Spring / Summer  
Flowering



Width  
46 cm  
(18")



Height  
50 cm  
(20")

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 18° - 20° C (65° - 68° F)		Weeks 3-4 100 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible. Avoid saturated soil conditions.



Daminozide spray application @ 1500 ppm week 4 may be required to control stretch in liner stage. Once rooted, allow soil to dry slightly between irrigations.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.3	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist			Day of sticking	
Week 2	5.6 / 6.3	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.6 / 6.3	.90 to 1.0	Cool to 65 / 68 F (18 / 20 C)	Feed 100 ppm N				
Week 4	5.6 / 6.3	1.0 to 1.2	65 to 68 F (18 to 20 C)	feed 100 ppm N		Daminozide as needed		Pinch at transplant

For additional technical growing information:

CELESTIA™ [CLICK HERE](#)



[www.danzigeronline.com](http://www.danzigeronline.com) |

# CELESTIA™

Agastache foeniculum



New  
2025

## FINISHING TIPS

- High quality plants are finished with high light and cool temperatures
- May require two pinches, depending on production schedule and container size

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch – Suggested day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 2500 ppm
15 cm (1 gallon)	(16° to 18°C)		Soil EC 1.0 - 1.2 pH 5.6 to 6.5	
10 to 12 wks				
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	
	Rhizoctonia	Pentachloronitrobenzene, Triflumizole



- PGR - Spray Daminozide at 2000 to 2500 ppm on finished plants early in crop schedule / Maintain good airflow and allow plants to dry before nightfall. Do not keep consistently wet or root rot problems may develop. The first signal of damp conditions would be yellowing of foliage and weak growth
- Scout for Aphids, Mites and Whitefly
- Drench after transplant for Pythium / Phytophthora and Rhizoctonia

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	61° to 65° F (16° to 18°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 12	5.5 to 6.3	1.0 to 1.2	61° to 65° (16° to 18°C)	feed 100 to 150 ppm				

For additional technical growing information:

CELESTIA™ [CLICK HERE](#)





# Pink Pearl *PPAF* & Parade of Parrots *PPAF* *Agastache hybrida*



**Pink Pearl *PPAF***

**TERRA NOVA**  
NURSERIES, INC.



- Cold Hardiness 6 - 10
- Glowing light pink blooms
- Natural June through September flowering response
- Mature height and width is 46 cm x 41 cm (18 x 16 inches)



**Parade of Parrots *PPAF***

For additional technical growing information:

Pink Pearl [CLICK HERE](#)

Parade of Parrots [CLICK HERE](#)



 **DANZIGER**  
[www.danzigeronline.com](http://www.danzigeronline.com) |   

# Pink Pearl PPAF

# & Parade of Parrots PPAF

Agastache hybrida



### PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
Early Summer / Summer  
Flowering



Width  
41 - 46 cm  
(16 - 18")



Height  
41 - 46 cm  
(16 - 18")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Optional	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible. Avoid saturated soil conditions.



Daminozide spray application @ 1500 ppm week 4 may be required to control stretch in liner stage. Once rooted, allow soil to dry slightly between irrigations

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Optional		Day of sticking	
Week 2	5.6 to 6.2	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.2	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm N				
Week 4	5.6 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 ppm N				
Week 5	5.6 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 ppm N		Optional		

For additional technical growing information:

Pink Pearl [CLICK HERE](#)

Parade of Parrots [CLICK HERE](#)





# Pink Pearl PPAF & Parade of Parrots PPAF *Agastache hybrida*



## FINISHING TIPS

- High quality plants are finished with high light and cool temperatures
- Pinch at transplant
- Allow some growth under short days to 'bulk plants before initiation

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch required/ long day flowering response	100 - 150 ppm N	Daminozide spray at 2,000 to 2,500 ppm
15 cm (1 gallon)	(16° to 18°C)			
10 to 12 wks	1 - 2 plants per container		Soil EC 0.8 – 1.0 pH 5.6 to 6.5	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- Facultative Long Day Flowering Response – June through September
- Natural foliar disease resistance
- Maintain good airflow and allow plants to dry between irrigations
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.2	0.8 to 1.0	65° to 68° F (18° to 20°C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 12	5.6 to 6.2	0.8 to 1.0	60° to 65° F (16° to 18°C)	feed 150 to 200 ppm		Daminozide spray at 2,000 to 2,500 ppm	Spray fungicide in finishing protocols	Control of Bacterial Leaf Blights

For additional technical growing information:

Pink Pearl [CLICK HERE](#)

Parade of Parrots [CLICK HERE](#)

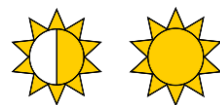


# SUNNY SPARKS™

Agastache hybrid



**Sunny Sparks™  
Pink Imp.**



- No vernalization or cooling required (First Year Flowering)
- Well matched series
- Fast to finish
- Sturdy habit covered with fragrant blooms
- Pollinator friendly
- Cold Hardiness 7 - 10
- Mature height and width is 15 x 16 inches (38 cm x 40 cm)

More varieties in the SUNNY SPARKS™ series:



**Sunny Sparks™  
Tangerine**



**Sunny Sparks™  
Yellow**

For additional technical growing information:

SUNNY SPARKS™ [CLICK HERE](#)





# SUNNY SPARKS™

Agastache hybrid



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
Spring / Summer  
Flowering



Width  
40 cm  
(15")



Height  
38 cm  
(16")

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Agastache respond to long days for flowering (facultative long day plant). The Sunny Sparks™ series will flower early enough for most regions. Daminozide at 1000 to 1500 ppm week 3.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.3	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist			Day of sticking	
Week 2	5.6 to 6.3	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist	Optional		Second fungicide app	
Week 3	5.6 to 6.3	.90 to 1.0	Cool to 65 / 68 F (18 / 20 C)	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed		
Week 4	5.6 to 6.3	1.0 to 1.2	65 to 68 F (18 to 20 C)	feed 100 to 150 ppm	Optional	Daminozide as needed		Pinch at transplant

For additional technical growing information:

SUNNY SPARKS™ [CLICK HERE](#)



# SUNNY SPARKS™

Agastache hybrid



## FINISHING TIPS

- Be cautious not to bury liner crown below soil line
- High quality plants are finished with high light and cool temperatures
- May require two or more pinches, depending on production schedule

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 8 wks	Average Day	Pinch – Suggested day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon)	(20° to 21°C)			
8 to 10 wks			Soil EC 1.0 - 1.2 pH 5.6 to 6.2	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule / Paclobutrazol drench application at 1 to 2 ppm for finishing if required
- Maintain good airflow and allow plants to dry before nightfall. Do not keep consistently wet or root rot problems may develop. The first signal of damp conditions would be yellowing of foliage and weak growth
- Scout for Aphids, Mites and Whiteflies
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
<b>Week 5 Transplant</b>	5.6 to 6.2	1.0 to 1.2	68° to 70° F (20° to 21° C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
<b>Week 6 to 13</b>	5.6 to 6.2	1.0 to 1.2	68° to 70° F (20° to 21° C)	feed 100 to 150 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

SUNNY SPARKS™ [CLICK HERE](#)



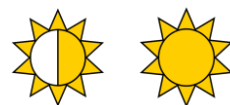


# PAVILION™

*Caryopteris incana*



**PAVILION™**  
**Pink**



- Cold Hardiness 6 – 10
- Short day plant – flowering begins week 36
- No vernalization or cooling required (First Year Flowering)
- Mature height and width is 51 cm x 41 cm (20 x 16 inches)

More varieties in the PAVILION™ series:



**PAVILION™**  
**White**



**PAVILION™**  
**Blue**

For additional technical growing information:

PAVILION™ [CLICK HERE](#)



# PAVILION™

Caryopteris incana



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
**Spring / Summer  
Flowering**




Width  
**41 cm  
(16")**



Height  
**51 cm  
(20")**

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)	PAVILION	Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2

 **Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



**Caryopteris incana** respond to short days for flowering. Stick roughly week 26 for finishing in the fall. Daminozide at 1500 to 2500 ppm week 4 may be required to control stretch in liner stage.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 / 6.2	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist			Day of sticking	
Week 2	5.5 / 6.2	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist	Optional		Second fungicide app	
Week 3	5.5 / 6.2	.90 to 1.0	Cool to 65 / 68 F (18 / 20 C)	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed		
Week 4	5.5 / 6.2	1.0 to 1.2	65 to 68 F (18 to 20 C)	feed 100 to 150 ppm	Optional	Daminozide as needed		Pinch at transplant

For additional technical growing information:

PAVILION™ [CLICK HERE](#)





# PAVILION™

Caryopteris incana



## FINISHING TIPS

- Pinching is required for branching and controlling height
- High quality plants will finish in all regions / hot and cool regions

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 10 wks	Average Day	Pinch – Suggested day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 2500 ppm
15 cm (1 gallon)	(20° to 21°C)		Soil EC 1.0 - 1.2 pH 5.5 to 6.2	
8 to 10 wks				
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	
	Rhizoctonia	Pentachloronitrobenzene, Triflumizole



- PGR - Spray Daminozide at 2000 to 2500 ppm on finished plants early in crop schedule
- Maintain good airflow and allow plants to dry before nightfall. Do not keep consistently wet or root rot problems may develop.
- Scout for Aphids, Mites and Whiteflies
- Drench after transplant for Pythium / Phytophthora and Rhizoctonia

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.2	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 15	5.6 to 6.2	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm				

For additional technical growing information:

PAVILION™ [CLICK HERE](#)



# Coreopsis

Verticillata



**LADYBIRD**

**TERRA NOVA**  
NURSERIES, INC.



- Coreopsis verticillata are extra hardy
- Mildew-resistant foliage
- Natural June through October flowering response
- Mature height and width is 51 cm x 61 cm (20 x 24 inches)

More varieties in the Coreopsis series:



**BANGAL TIGER**



**FIREFLY**

For additional technical growing information:

BANGAL TIGER [CLICK HERE](#)

LADYBIRD [CLICK HERE](#)

FIREFLY [CLICK HERE](#)



# Coreopsis

Verticillata



## PROPAGATION TIPS

- Stick on priority – Number 3 out of 4 categories



Flowering time

Early Summer / Summer  
Flowering



Width

51 - 61 cm  
(20 - 24")



Height

46 - 51 cm  
(18 - 20")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Remove from mist as soon as root emerges



Spray adjuvant the day of sticking. Moderate moisture for the rooting media.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Required 12 hr daylength		Day of sticking	
Week 2	5.8 to 6.5	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.5	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm N				
Week 4	5.8 to 6.5	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 ppm N				
Week 5	5.8 to 6.5	.90 to 1.0	65 to 68 F (18 to 20 C)	Feed 100 ppm N		Should not be required		

For additional technical growing information:

BANGAL TIGER [CLICK HERE](#)

LADYBIRD [CLICK HERE](#)

FIREFLY [CLICK HERE](#)





# Coreopsis

Verticillata



## FINISHING TIPS

- Pinch required for quality finishing
- Daminozide spray application @ 2000 to 2500 ppm
- Cold beneficial (weeks of night temperatures below 55 F)

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch required/ Obligate long day	100 - 150 ppm N	Daminozide spray application @ 2000 to 2500 ppm
15 cm (1 gallon)	(18° to 20°C)			
8 to 10 wks	3 plants per container		Soil EC 0.8 – 1.0	
20 cm (2 gallon)			pH 5.8 to 6.5	

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- Long Day Flowering Response – June through October
- Natural foliar disease resistance
- Maintain good airflow and allow plants to dry between irrigations
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.5	0.8 to 1.0	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 13	5.8 to 6.5	0.8 to 1.0	65° to 68° F (18° to 20°C)	feed 150 to 200 ppm			Spray fungicide in finishing protocols	Control of Bacterial Leaf Blights

For additional technical growing information:

BANGAL TIGER [CLICK HERE](#)

LADYBIRD [CLICK HERE](#)

FIREFLY [CLICK HERE](#)

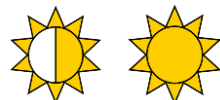


# SOLANNA™

Coreopsis grandiflora



**SOLANNA™ Sunset Bright**



- Cold Hardiness 4 - 9
- No vernalization or cooling required (First Year Flowering) however most varieties benefit from 14 days of cool temperatures (10C/50F or less)
- Blooms spring to fall
- Well branched
- Height and width vary within the series

More varieties in the SOLANNA™ series:



**SOLANNA™ Yellow Touch**



**SOLANNA™ Golden Sphere**

Recommended for  
12-18 cm pots



**SOLANNA™ Sunshine**

Recommended for  
15-18 /30-36 cm pots



**SOLANNA™ Glow**

Recommended for  
15-18 /30-36 cm pots



**SOLANNA™ Sunset Burst**

Recommended for  
15-18 /30-36 cm pots



**SOLANNA™ Golden Princess**

Recommended for  
12-18 cm pots



**SOLANNA™ Bright Touch**

Recommended for 12-18  
cm pots



**SOLANNA™ Golden Crown**

Recommended for  
15-18 /30-36 cm pots

For additional technical growing information:

SOLANNA™ [CLICK HERE](#)



 **DANZIGER**

[www.danzigeronline.com](http://www.danzigeronline.com) |   

# SOLANNA™

Coreopsis grandiflora



## FINISHING TIPS

- Pinch should not be required unless plants have elongated
- Spray for Powdery Mildew and bacterial leaf spot during production
- Better production plants are finished with high light and cool temperatures

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 9 wks	Average Day	Pinch – Optional	150- 200 ppm N	Daminozide spray application @ 2500 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
12-15 cm (Qt/1 gallon)	(20° to 21°F)			
9 to 10 wks			Soil EC 1.0 - 1.2 pH 5.6 to 6.2	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2500 to 3750 ppm on finished plants early in crop schedule / Paclobutrazol drench application at 1 to 2 ppm for finishing if required
- Maintain good airflow and allow plants to dry before nightfall. Spray for Powdery Mildew
- Scout for Aphids, Thrips and Whiteflies
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
<b>Week 6 Transplant</b>	5.6 to 6.2	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 150 to 200 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
<b>Week 6 to 13</b>	5.6 to 6.2	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 150 to 200 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

SOLANNA™ [CLICK HERE](#)





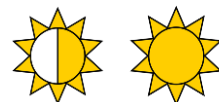
# DELIGHTFUL™

*Delosperma cooperi*

AVAILABLE IN  
EU & ROW



**DELIGHTFUL™**  
**Red**



- No vernalization or cooling required (First Year Flowering)
- Strong heat and drought tolerance make these series perfect for summer programs
- More compact mounded habit
- Suitable for a six pack programs
- Cold Hardiness 5 - 10
- Mature height and width is 5 X 3 inches (13 cm x 8 cm)

More varieties in the DELIGHTFUL™ series:



**DELIGHTFUL™**  
**White**



**DELIGHTFUL™**  
**Yellow**



**DELIGHTFUL™**  
**Pink**

For additional technical growing information:

DELIGHTFUL™ [CLICK HERE](#)



# DELIGHTFUL™

Delosperma cooperi



AVAILABLE IN  
EU & ROW

## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

35 cm  
(14")



Height

12 cm  
(5")

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 20° - 21° C (68° - 70° F)		Weeks 3-4 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Delosperma are day neutral and prefers bright light conditions for maximum flowering.  
Daminozide at 1500 to 2000 ppm week 3 if required.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 / 6.5	0.80	72 / 74 F (22 / 23 C)	50 ppm N in mist			Day of sticking	
Week 2	5.5 to 6.5	.80 to .90	72 / 74 F (22 / 23 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.5 to 6.5	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm		Daminozide as needed		Pinch week 3 or at transplant
Week 4	5.5 to 6.5	1.0 to 1.2	68 to 60 F (20 to 21C)	feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

DELIGHTFUL™ [CLICK HERE](#)



[www.danzigeronline.com](http://www.danzigeronline.com) | [YouTube](#) [LinkedIn](#) [Facebook](#)

# DELIGHTFUL™

Delosperma cooperi



AVAILABLE IN  
EU & ROW

## FINISHING TIPS

- High quality plants with many more flowers are finished with high light
- Cool temperatures may create stress and develop yellow stems (at tips)/ when temperatures warm, the plants will become green

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 9 wks	Average Day	Pinch – Suggested week 3 or day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm
15 cm (1 gallon)	(20° to 21°C)			
9 to 11 wks			Soil EC 1.2 - 1.5	
20 cm (2 gallon)			pH 5.5 to 6.3	

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule
- Cool temperatures may create yellowing at the end of plant stems
- Maintain good airflow and allow plants to dry before nightfall.
- Scout for Aphids, Mites and Scale
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 14	5.5 to 6.3	1.2 to 1.5	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm				

For additional technical growing information:

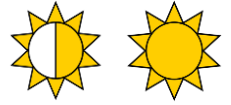
DELIGHTFUL™ [CLICK HERE](#)





# EARLY BIRD™

*Delosperma cooperi*



**EARLY BIRD™**  
**Purple**

- No vernalization or cooling required (First Year Flowering)
- Blooms are the first to open in the morning
- Strong heat and drought tolerance make these series perfect for summer programs
- Cold Hardiness 5 - 10
- Mature height and width is 5 X 14 inches (12 cm x 35 cm)

For additional technical growing information:

EARLY BIRD™ [CLICK HERE](#)

SANDGEM™ [CLICK HERE](#)



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[www.danzigeronline.com](http://www.danzigeronline.com) |   

# EARLY BIRD™

Delosperma cooperi



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
Spring / Summer  
Flowering



Width  
35 cm  
(14")



Height  
12 cm  
(5")

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 20° - 21° C (68° - 70° F)		Weeks 3-4 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Delosperma are day neutral and prefers bright light conditions for maximum flowering. Daminozide at 1500 to 2000 ppm week 3 if required.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 / 6.5	0.80	72 / 74 F (22 / 23 C)	50 ppm N in mist			Day of sticking	
Week 2	5.5 to 6.5	.80 to .90	72 / 74 F (22 / 23 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.5 to 6.5	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm		Daminozide as needed		Pinch week 3 or at transplant
Week 4	5.5 to 6.5	1.0 to 1.2	68 to 70 F (20 to 21 C)	feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

EARLY BIRD™ [CLICK HERE](#)

SANDGEM™ [CLICK HERE](#)



# EARLY BIRD™

Delosperma cooperi



## FINISHING TIPS

- High quality plants with many more flowers are finished with high light
- Cool temperatures may create stress and develop yellow stems (at tips)/ when temperatures warm, the plants will become green

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 9 wks	Average Day	Pinch – Suggested week 3 or day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm
15 cm (1 gallon)	(20° to 21°C)			
9 to 11 wks			Soil EC 1.2 - 1.5	
20 cm (2 gallon)			pH 5.5 to 6.3	

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule
- Cool temperatures may create yellowing at the end of plant stems
- Maintain good airflow and allow plants to dry before nightfall.
- Scout for Aphids, Mites and Scale
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 14	5.5 to 6.3	1.2 to 1.5	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm				

For additional technical growing information:

EARLY BIRD™ [CLICK HERE](#)

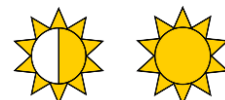
SANDGEM™ [CLICK HERE](#)





# SANDGEM™

Delosperma cooperi



**SANDGEM™**  
**Fuchsia**

- No vernalization or cooling required (First Year Flowering)
- SANDGEM™ has large flowers with a trailing plant habit
- Strong heat and drought tolerance make these series perfect for summer programs
- Cold Hardiness 5 - 10
- Mature height and width is 5 X 14 inches (12 cm x 35 cm)

More varieties in the SUNSTRONG™ series:



**SANDGEM™**  
**Dark Orange**



**SANDGEM™**  
**Yellow**



**SANDGEM™**  
**White**



**SANDGEM™**  
**Ember**

For additional technical growing information:

SANDGEM™ [CLICK HERE](#)



# SANDGEM™

Delosperma cooperi



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

35 cm  
(14")



Height

12 cm  
(5")

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 20° - 21° C (68° - 70° F)		Weeks 3-4 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Delosperma are day neutral and prefers bright light conditions for maximum flowering.  
Daminozide at 1500 to 2000 ppm week 3 if required.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 / 6.5	0.80	72 / 74 F (22 / 23 C)	50 ppm N in mist			Day of sticking	
Week 2	5.5 to 6.5	.80 to .90	72 / 74 F (22 / 23 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.5 to 6.5	.90 to 1.0	Cool to 68 / 70 (20 / 21 C)	Feed 100 ppm to 150 ppm		Daminozide as needed		Pinch week 3 or at transplant
Week 4	5.5 to 6.5	1.0 to 1.2	68 to 70 F (20 to 21 C)	feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

SANDGEM™ [CLICK HERE](#)



# SANDGEM™

Delosperma cooperi



## FINISHING TIPS

- High quality plants with many more flowers are finished with high light
- Cool temperatures may create stress and develop yellow stems (at tips)/ when temperatures warm, the plants will become green

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 9 wks	Average Day	Pinch – Suggested week 3 or day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm
15 cm (1 gallon)	(20° to 21°C)			
9 to 11 wks			Soil EC 1.2 - 1.5 pH 5.5 to 6.3	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule
- Cool temperatures may create yellowing at the end of plant stems
- Maintain good airflow and allow plants to dry before nightfall.
- Scout for Aphids, Mites and Scale
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 14	5.5 to 6.3	1.2 to 1.5	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm				

For additional technical growing information:

SANDGEM™ [CLICK HERE](#)



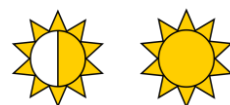


# DELILAH™

*Dianthus plumarius*



**DELILAH™**  
**Bicolor Purple**



- Cold Hardiness 4 - 9
- No vernalization or cooling required (First Year Flowering)
- Abundant semi-double flowers early in spring
- Mature height and width is 25 cm x 35 cm (10 x 14 inches)

More varieties in the DELILAH™ series:



**DELILAH™**  
**Bicolor Magenta**



**DELILAH™**  
**Magenta**



**DELILAH™**  
**Purple**

For additional technical growing information:

DELILA™ [CLICK HERE](#)



# DELILAH™

Dianthus plumarius



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
Early Spring / Spring  
Flowering



Width  
35 cm  
(14")



Height  
25 cm  
(10")

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Optoinal	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 20° - 21° C (68° - 70° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



KIBA rooting hormone spray applications will hasten and improve uniformity of rooting. Daminozide at 1500 to 2000 ppm week 3 if required in warm greenhouse conditions.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 / 6.3	0.80	72 / 74 F (22 / 23 C)	50 ppm N in mist	Day neutral		Day of sticking	
Week 2	5.5 to 6.3	.80 to .90	72 / 74 F (22 / 23 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.5 to 6.3	.80 to 1.0	Cool to 65 F (18 C)	Feed 100 to 150 ppm				
Week 4	5.5 to 6.3	.80 to 1.0	60 to 65 F (16 to 18 C)	feed 100 to 150 ppm		Daminozide as needed		Pinch Optional

For additional technical growing information:

DELILA™ [CLICK HERE](#)



# DELILAH™

*Dianthus plumarius*



## FINISHING TIPS

- High quality plants with many more flowers are finished with high light
- Cool temperature finishing will create the best quality.

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 9 wks	Average Day	Pinch –Should not be required unless liners are elongated	100 - 150 ppm N	Daminozide spray application @ 2000 – 2500 ppm
15 cm (1 gallon)	(16° to 18°C)			
9 to 11 wks			Soil EC 1.0 - 1.2 pH 5.5 to 6.3	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 2500 ppm on finished plants early in crop schedule
- Cool temperatures will finish highest quality plants
- Scout for Aphids, Mites and Thrips
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	65° F (18° C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 14	5.5 to 6.3	1.0 to 1.2	60° to 65° F (16° to 18°C)	feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

DELILA™ [CLICK HERE](#)





# DELILAH™

*Dianthus plumarius*



## Trials in North America



For additional technical growing information:

DELILA™ [CLICK HERE](#)



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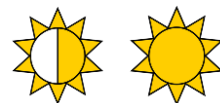


# GUATEMALA™

Echinacea hybrid



**Guatemala™ Papaya**



- Cold Hardiness 5 - 9
- No vernalization or cooling required (First Year Flowering)
- Natural June flowering response
- Second vegetative Echinacea available from URC
- Mature height and width is 20 cm x 36 cm (8 x 14 inches)



**Guatemala™ Gold**

For additional technical growing information:

GUATEMALA™ [CLICK HERE](#)



# GUATEMALA™

Echinacea hybrid



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories

Flowering time	Width	Height
Spring / Summer Flowering	18 - 26 cm (7 - 10")	30 - 38 cm (12 - 15")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2

**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible

K-IBA spray application will hasten and even rooting response. Echinacea Panama™ are long day flowering with the natural flowering response being June (facultative long day plant). An adequate substrate for young plants with a pH of 5.8 to 6,5 and a EC of 0,8 mS.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Required 12 hr daylength		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm				
Week 5	5.8 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm		Daminozide if needed		1500 to 2000 ppm Daminozide

For additional technical growing information:

GUATEMALA™ [CLICK HERE](#)





# GUATEMALA™

Echinacea hybrid



## FINISHING TIPS

- No pinch should be needed
- Naturally compact plant habit
- Spray for bacterial leaf blights

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch not required/ extend daylength to 12 hours for early flowering	100 - 150 ppm N	Daminozide spray application @ 2000 – 2500 ppm
15 cm (1 gallon)	(20° to 21°C)			
8 to 10 wks	3 plants per container		Soil EC 0.8 – 1.2	
20 cm (2 gallon)			pH 5.8 to 6.2	

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- Long Day Flowering Response Natural flowering time is weeks 24 - 27
- PGR - Spray Daminozide at 2000 to 2500 ppm on finished plants early in crop schedule if needed
- Maintain good airflow and allow plants to dry before nightfall/spray for bacterial leaf blights
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	0.8 to 1.0	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 13	5.8 to 6.2	0.8 to 1.2	68° to 70° F (20° to 21°C)	feed 150 to 200 ppm			Spray fungicide in finishing protocols	Control of Bacterial Leaf Blights

For additional technical growing information:

GUATEMALA™ [CLICK HERE](#)



# GUATEMALA™

Echinacea hybrid



**Israel November 2022**



For additional technical growing information:

GUATEMALA™ [CLICK HERE](#)



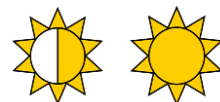
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# PANAMA™

Echinacea hybrid



**PANAMA™ Rose**



- Cold Hardiness 5 - 9
- No vernalization or cooling required (First Year Flowering)
- Natural June flowering response
- First vegetative Echinacea available from URC
- Mature height and width is 35 cm x 41 cm (14 x 16 inches)



**PANAMA™ Red**

For additional technical growing information:

PANAMA™ [CLICK HERE](#)





# PANAMA™

Echinacea hybrid



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
Spring / Summer  
Flowering



Width  
36 - 41 cm  
(14 - 16")



Height  
30 - 36 cm  
(12 - 14")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



K-IBA spray application will hasten and even rooting response. Echinacea Panama™ are long day flowering with the natural flowering response being June (facultative long day plant). An adequate substrate for young plants with a pH of 5.8 to 6,5 and a EC of 0,8 mS.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Required 12 hr daylength		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm				
Week 5	5.8 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm		Daminozide if needed		1500 to 2000 ppm Daminozide

For additional technical growing information:

PANAMA™ [CLICK HERE](#)



# PANAMA™

Echinacea hybrid



## FINISHING TIPS

- No pinch should be needed
- Naturally compact plant habit
- Spray for bacterial leaf blights

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch not required/ extend daylength to 12 hours for early flowering	100 - 150 ppm N	Daminozide spray application @ 2000 – 2500 ppm
15 cm (1 gallon)	(20° to 21°C)			
8 to 10 wks	3 plants per container		Soil EC 0.8 – 1.2	
20 cm (2 gallon)			pH 5.8 to 6.2	

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- Long Day Flowering Response Natural flowering time is weeks 24 - 27
- PGR - Spray Daminozide at 2000 to 2500 ppm on finished plants early in crop schedule if needed
- Maintain good airflow and allow plants to dry before nightfall/spray for bacterial leaf blights
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	0.8 to 1.0	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 13	5.8 to 6.2	0.8 to 1.2	68° to 70° F (20° to 21°C)	feed 150 to 200 ppm			Spray fungicide in finishing protocols	Control of Bacterial Leaf Blights

For additional technical growing information:

PANAMA™ [CLICK HERE](#)

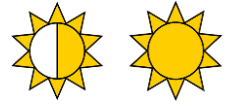


# SUNSTRONG™

Erysimum linifolium



**SUNSTRONG™**  
**Yellow**



- Cold Hardiness 6 - 9
- No vernalization or cooling required (First Year Flowering)
- Early spring flower response
- Heat tolerant for continued flowering in summer months
- Mature height and width is 50 cm x 46 cm (20 x 18 inches)

More varieties in the SUNSTRONG™ series:



**SUNSTRONG™**  
**Violet**



**SUNSTRONG™**  
**Orange Imp.**



**SUNSTRONG™**  
**Bicolor Purple**

For additional technical growing information:

SUNSTRONG™ [CLICK HERE](#)



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# SUNSTRONG™

Erysimum linifolium



## PROPAGATION TIPS

- Stick on priority – Number 3 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

38 - 46 cm  
(15 - 18")



Height

41 - 51 cm  
(16 - 20")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Erysimum is day neutral. The SunStrong™ series will flower early enough for most regions. Daminozide at 1500 to 2500 ppm week 4.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.80 to .90	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.80 to .90	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm		Daminozide as needed		Pinch recommended
Week 5	5.8 to 6.2	.80 to .90	65 F (18 C)	Feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

SUNSTRONG™ [CLICK HERE](#)



# SUNSTRONG™

Erysimum linifolium



## FINISHING TIPS

- A second pinch will shape plants and promote even flower response
- Allow soil to dry between irrigations

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 9 wks	Average Day	Pinch – Suggested day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon)	(16°C)			
9 to 10 wks			Soil EC 1.0 - 1.2 pH 5.8 to 6.2	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule / Paclobutrazol drench application at 1 to 2 ppm for finishing if required
- Maintain good airflow and allow plants to dry before nightfall
- Scout for Aphids, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
<b>Week 6 Transplant</b>	5.8 to 6.2	.08 to 1.0	65° to 68° F (18° to 20°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
<b>Week 6 to 13</b>	5.8 to 6.2	0.8 to 1.2	50° to 60° F (10° to 16°C)	feed 100 to 150 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

SUNSTRONG™ [CLICK HERE](#)

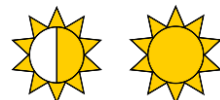


# GUSTO™

Gaillardia hybrida



**GUSTO™**  
**Paprika**



- Cold Hardiness 4 - 9
- No vernalization or cooling required (First Year Flowering)
- Well matched series of 4 colors
- Tested for rooting
- New blooms cover the old ones “buries” its dead
- Mounded habit
- Mature height and width is 35 cm x 45 cm (14 x 18 inches)

More varieties in the GUSTO™ series:



**GUSTO™**  
**Lemon**



**GUSTO™**  
**Sweet Chili**

For additional technical growing information:

GUSTO™ [CLICK HERE](#)



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# GUSTO™

Gaillardia hybrida



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

35 - 45 cm  
(14 - 18")



Height

35 - 40 cm  
(14 - 16")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Gaillardia respond to long days for flowering (obligate long day plant). The Gusto™ series will flower early enough for most regions. Daminozide at 1000 to 1500 ppm week 3.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72° / 74° F (22° / 23° C)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72° / 74° F (22° / 23° C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68° / 70° F (20° / 21° C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.90 to 1.0	68° to 70° F (20° to 21° C)	Feed 100 to 150 ppm		Daminozide as needed		
Week 5	5.8 to 6.2	1.0 to 1.2	65° F (18° C)	Feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

GUSTO™ [CLICK HERE](#)



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# GUSTO™

Gaillardia hybrida



## FINISHING TIPS

- Low fertility will reduce plant size and hasten flowering
- High quality plants are finished with cool temperatures

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8 wks	Average Day	Pinch – Suggested day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon)	20° C to 22° C (68° to 70°F)		Soil EC 1.0 - 1.2 pH 5.8 to 6.2	
9 to 10 wks				
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule / Paclobutrazol drench application at 1 to 2 ppm for finishing if required
- Maintain good airflow and allow plants to dry before nightfall
- Scout for Aphids, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
<b>Week 6 Transplant</b>	5.8 to 6.2	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium &
<b>Week 6 to 13</b>	5.8 to 6.2	1.0 to 1.2	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

GUSTO™ [CLICK HERE](#)

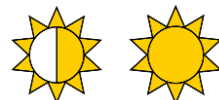


# STEFFI™

Gaura lindheimeri



**STEFFI™**  
**Dark Rose Imp.**



- Cold Hardiness 5 - 9
- No vernalization or cooling required (First Year Flowering)
- Early spring flower response
- Easy to root
- STEFFI White has consistent and beautiful upright dark green foliage without the red spotting common to older genetics
- Mature height and width is 46 cm x 51 cm (18 x 20 inches)

More varieties in the STEFFI™ series:



**STEFFI™**  
**Blush Pink Imp.**



**STEFFI™**  
**White**

For additional technical growing information:

STEFFI™ [CLICK HERE](#)





# STEFFI™

Gaura lindheimeri



## PROPAGATION TIPS

- Stick on priority – Number 3 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

46 - 51 cm  
(18 - 20")



Height

41 - 46 cm  
(16 - 18")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible. Best to root in high humidity and reduced mist.



Gaura are facultative long day plants/flowering is hastened under long days. Daminozide at 1500 to 2500 ppm week 4. Pinch at transplant.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.80 to .90	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.80 to .90	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm		Daminozide as needed		
Week 5	5.8 to 6.2	.80 to .90	65 to 68 F (18 to 20 C)	Feed 100 to 150 ppm		Daminozide as needed		Pinch recommended

For additional technical growing information:

STEFFI™ [CLICK HERE](#)



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# STEFFI™

Gaura lindheimeri



## FINISHING TIPS

- Maintain soil evenly moist
- High light levels best for finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
9 to 10 wks	Average Day	Pinch – Suggested day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm
15 cm (1 gallon)	(18°C)			
9 to 11 wks			Soil EC 0.8 - 1.0 pH 5.8 to 6.2	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule
- Maintain good airflow and allow plants to dry before nightfall
- Scout for Aphids, Leafminors, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	.08 to 1.0	65° to 68° F (18° to 20°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 14	5.8 to 6.2	0.8 to 1.0	60° to 65° F (16° to 18°C)	feed 100 to 150 ppm				

For additional technical growing information:

STEFFI™ [CLICK HERE](#)



# FESTIVAL®

*Gypsophila paniculata*



**FESTIVAL®**  
**White**

- Cold Hardiness 4 - 8
- No vernalization or cooling required (First Year Flowering)
- Great summer performer
- Mature height and width is 35 cm x 45 cm (24 x 12 inches)

More varieties in the FESTIVAL® series:



**FESTIVAL®**  
**Pink Lady**



**FESTIVAL®**  
**White Flare**

For additional technical growing information:

FESTIVAL® [CLICK HERE](#)





# FESTIVAL®

*Gypsophila paniculata*



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time

**Summer  
Flowering**



Width

**25 - 30 cm  
(10 - 12")**



Height

**51 - 61 cm  
(20 - 24")**

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Gypsophila prefer humidity from tenting vs misting foliage and soil. Rooting hormone and dry soil conditions are more conducive to uniform rooting.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.5	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Long day flowering		Day of sticking	
Week 2	5.8 to 6.5	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.5	.90 to 1.0	Cool to 68 F (20 C)	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.8 to 6.5	.90 to 1.0	65 to 68 F (18 to 20 C)	Feed 100 to 150 ppm		Daminozide as needed		
Week 5	5.8 to 6.5	1.0 to 1.2	60 to 65 F (16 to 18 C)	Feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

FESTIVAL® [CLICK HERE](#)



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# FESTIVAL®

*Gypsophila paniculata*



## FINISHING TIPS

- Festival Gypsophila will require daylength greater than 12 hours to flower
- Allow soil to dry between irrigations
- Best when grown under high light with cool temperatures

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch – Suggested day of transplant with possible second pinch	150 - 200 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon)	(16° to 18°C)			
9 to 10 wks			Soil EC 1.2 - 1.5 pH 5.8 to 6.5	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRADIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule / Paclobutrazol drench application at 1 to 2 ppm for finishing if required
- Pinch leaving 4 to 6 nodes on stem
- Scout for Aphids, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
<b>Week 6 Transplant</b>	5.8 to 6.5	1.0 to 1.2	60° to 65° F (16° to 18°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
<b>Week 6 to 13</b>	5.8 to 6.5	1.2 to 1.5	60° to 65° F (16° to 18°C)	feed 150 to 200 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

FESTIVAL® [CLICK HERE](#)

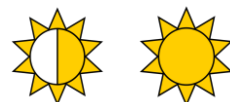


# ENDLESSLILY™

Hemerocallis hybrid



**ENDLESSLILY™**  
**Coral Imp.**



- Compact plant habit
- Repeat flowering through the season
- Mature Height & Width - 16" (40 cm) by 16" (40 cm)

More varieties in the ENDLESSLILY™ series:



**ENDLESSLILY™**  
**Orange**



**ENDLESSLILY™**  
**Yellow**

For additional technical growing information:

ENDLESSLILY™ [CLICK HERE](#)





# ENDLESSLILY™

Hemerocallis hybrid



## Cultivation TIPS

- Transplant upon receipt of product
- Keep night temperatures above 62° F (17° C). Lower temperatures will stall plant growth and development when establishing plants
- Allow plants to dry between irrigation once plant is established
- When planting, cover the crown with soil
- Finish under high light



Flowering time  
Spring / Summer  
Flowering



Width  
(14 to 16")  
36 - 40 cm



Height  
(16 to 18")  
40 - 46 cm

10 to 12 wks				
(15 cm) 1 gallon	Medium size division			
(20 cm) 2 gallon	Large division with multiple eyes			

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- Cool, wet weather may bring on Fusarium or Rhizoctonia. There are also a few leaf spot diseases which may develop under damp, low light conditions
- Establish with evenly moist soil, then allow soil to dry between irrigations when roots are develop
- Scout for Aphids, Spider Mites and Thrips on regular basis along with Leaf Minors.

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	6.0 to 6.5	1.0 to 1.2	ADT 65 F (18 C)	feed 100 to 150 ppm		Grow under high light and cool temperatures	Spray fungicide after transplant	Establish roots under warmer temperatures
Week 6 to 12	6.0 to 6.5	1.0 to 1.5	ADT 65 F (18 C)	feed 150 to 200 ppm				Finish under cooler temperatures

For additional technical growing information:

ENDLESSLILY™ [CLICK HERE](#)



# KIRA™

Heuchera



**KIRA™  
Arizona**

- Cold Hardiness 4 - 9
- Great summer performance
- Ideal for mixed containers
- Mature height and width is 20 cm x 45 cm (8 x 12 inches)

More varieties in the KIRA™ series:



**KIRA™  
Green Tea**



**KIRA™  
Evergreen Forest**



**KIRA™  
Jersey**



**KIRA™  
Purple Rain Forest Improved**

For additional technical growing information:

KIRA™ [CLICK HERE](#)



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# KIRA™

Heuchera



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
**Summer  
Flowering**




Width  
**30 - 36 cm  
(12 - 14")**



Height  
**20 - 25 cm  
(8 - 10")**

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 ppm N	Day of sticking & Week 2

 **Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Heuchera & Heucherella prefer humidity from tenting vs misting foliage and soil. Rooting hormone and dry soil conditions are more conducive to uniform rooting.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.7 / 6.5	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist			Day of sticking	
Week 2	5.7 to 6.5	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.7 to 6.5	.80 to .90	Cool to 68 F (20 C)	Feed 100 ppm				
Week 4	5.7 to 6.5	.80 to .90	65 to 68 F (18 to 20 C)	Feed 100 ppm N				
Week 5	5.7 to 6.5	.80 to .90	65 to 68 F (18 to 20 C)	Feed 100 ppm N		Should not be required		

For additional technical growing information:

KIRA™ [CLICK HERE](#)





# KIRA™

Heuchera



## FINISHING TIPS

- Some shade will be required for summer production
- Allow soil to dry between irrigations
- No pinch or PGR should be required

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch –not required	100 - 150 ppm N	
12 cm (Quart)	(18° to 20°C)			
10 to 12 wks			Soil EC 0.8 - 1.0 pH 5.7 to 6.5	
15 cm (1 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- A reduction in light will be needed for summer production
- Scout for Aphids, Mites and Whitefly
- Allow soil to dry between irrigations
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.7 to 6.5	0.8 to 1.0	65 to 68 F (18° to 20°C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 13	5.7 to 6.5	0.8 to 1.0	65 to 68 F (18° to 20°C)	feed 100 to 150 ppm				

For additional technical growing information:

KIRA™ [CLICK HERE](#)



# KIRELLA™

Heucherella hybrida



**KIRELLA™**  
**Fresh Green**

- Cold Hardiness 4 - 9
- Great summer performance
- Ideal for mixed containers
- Mature height and width is 20 cm x 45 cm (8 x 12 inches)

For additional technical growing information:

KIRELLA™ [CLICK HERE](#)



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# KIRELLA™

Heucherella hybrida



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
Summer  
Flowering



Width  
30 - 36 cm  
(12 - 14")



Height  
20 - 25 cm  
(8 - 10")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Heuchera & Heucherella prefer humidity from tenting vs misting foliage and soil. Rooting hormone and dry soil conditions are more conducive to uniform rooting.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.7 / 6.5	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist			Day of sticking	
Week 2	5.7 to 6.5	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.7 to 6.5	.80 to .90	Cool to 68 F (20 C)	Feed 100 ppm				
Week 4	5.7 to 6.5	.80 to .90	65 to 68 F (18 to 20 C)	Feed 100 ppm N				
Week 5	5.7 to 6.5	.80 to .90	65 to 68 F (18 to 20 C)	Feed 100 ppm N		Should not be required		

For additional technical growing information:

KIRELLA™ [CLICK HERE](#)



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# KIRELLA™

Heucherella hybrida



## FINISHING TIPS

- Some shade will be required for summer production
- Allow soil to dry between irrigations
- No pinch or PGR should be required

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch –not required	100 - 150 ppm N	
12 cm (Quart)	(18° to 20°C)			
10 to 12 wks			Soil EC 0.8 - 1.0 pH 5.7 to 6.5	
15 cm (1 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- A reduction in light will be needed for summer production
- Scout for Aphids, Mites and Whitefly
- Allow soil to dry between irrigations
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.7 to 6.5	0.8 to 1.0	65° to 68° F (18° to 20°C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 13	5.7 to 6.5	0.8 to 1.0	65° to 68° F (18° to 20°C)	feed 100 to 150 ppm				

For additional technical growing information:

KIRELLA™ [CLICK HERE](#)



# FIRST FLUSH™

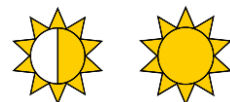
Iberis sempervirens



**FIRST FLUSH™ Grace**



**FIRST FLUSH™ Lavender**



- Cold Hardiness 5 - 9
- No vernalization or cooling required (First Year Flowering)
- Covered in light pastel tinted blooms
- Takes the heat which extends the selling season for this typically early spring season crop
- FIRST FLUSH™ Iberis benefits from 14 days of cool temperatures (10C/50F or less) for uniform flowering
- Mature height and width is 20cm x 36 cm (8 x 14 inches)

For additional technical growing information:

FIRST FLUSH™ [CLICK HERE](#)



# FIRST FLUSH™

Iberis sempervirens



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

36 cm  
(14")



Height

20 cm  
(8")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Optional	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



K IBA spray application will hasten and even rooting. It is best to root under high humidity and reduce misting application. Pinch is recommended week 4 or at transplant. Daminozide spray application at 1500 to 2500 if needed.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F (22 / 23 C)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F (22 / 23 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm				Pinch optional
Week 5	5.6 to 6.0	1.0 to 1.2	65 F (18 C)	Feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

FIRST FLUSH™ [CLICK HERE](#)





# FIRST FLUSH™

Iberis sempervirens



## FINISHING TIPS

- Evenly moist soil conditions is best
- High quality plants are finished with high light and cool temperatures
- May require two pinches, depending on production schedule for larger containers

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 9 wks	Average Day	Pinch Week 4 or day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol at 2 ppm drench
15 cm (1 gallon)	(18° C)		Soil EC 1.0 - 1.2 pH 5.6 to 6.0	
9 to 10 wks				
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule / Paclobutrazol drench application at 2 ppm for finishing if required
- Maintain good airflow and allow plants to dry before nightfall. Do not keep consistently wet or root rot problems may develop. The first signal of damp conditions would be yellowing of foliage and weak growth
- Scout for Aphids and Thrips
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	1.0 to 1.2	65° F (18°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 7 to 13	5.6 to 6.0	1.0 to 1.2	65° F (18°C)	feed 100 to 150 ppm		Paclobutrazol Drench at 2 ppm		Paclobutrazol 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

FIRST FLUSH™ [CLICK HERE](#)

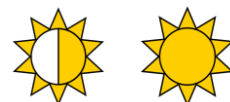


# LAMI™

Lamium maculatum



**LAMI™**  
**Dark Purple**



- Fast growing, multicolored leaves with large purple flowers
- Trailing ground cover plant for shady to partial shade locations
- Mature height and width is 6 inches x 12 inches (15cm x 30cm)

For additional technical growing information:

LAMI™ [CLICK HERE](#)



# LAMI™

Lamium maculatum



## PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories



Flowering time  
Spring / Summer  
Flowering



Width  
(12" to 14")  
30 to 36 cm



Height  
(4" to 6")  
10 to 15cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	Optional	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 65° - 68° (18° - 20° C)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** - Remove from mist as soon as possible. Scout specifically for Botrytis



Daminozide at 1500 – 2000 ppm week 3 and/or 5 as required  
Pinch at transplant

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F (22 / 23 C)	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F (22 / 23 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 70 F (21 C)	Feed 100 ppm to 125 ppm N		Daminozide as needed		
Week 4	5.8 to 6.2	.90 to 1.0	68 F (20 C)	feed 100 to 125 ppm N				
Week 5	5.8 to 6.2	.90 to 1.0	65 to 68 F (18 to 20 C)	feed 100 to 125 ppm N	None required	Daminozide as needed		Pinch at transplant

For additional technical growing information:

LAMI™ [CLICK HERE](#)



 **DANZIGER**

[www.danzigeronline.com](http://www.danzigeronline.com) | 



# LAMI™

Lamium maculatum



## FINISHING TIPS

- Pinch at transplant or soon after transplant
- Moderate moist soils will avoid marginal browning of leaves from drying
- Avoid bright direct light
- Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
5 to 7 wks	Average Day	Pinch – Required	150 - 200 ppm N	To control stretch if finishing warm
(12 cm) 5” pot	68° to 72°F (20° to 22°C) early in crop			
6 to 8 wks	65° - 68° (18° - 20° C) finishing temperatures		Soil EC 0.9 to 1.0 pH 5.8 to 6.2	
(15 cm) 6 ½”				

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Snail & Slugs	Ferric Phosphate Pellets or Sprays
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 1500 to 2500 ppm early on finished plants
- Maintain good airflow and allow plants to dry before nightfall
- Scout for Aphid and Slugs/Snail on regular basis

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
<b>Week 6 Transplant</b>	5.8 to 6.2	0.9 to 1.0	65 to 68 F (18 to 20 C)	feed 150 to 200 ppm		Daminozide as needed	Spray fungicide after transplant	
<b>Week 6 to 10</b>	5.8 to 6.2	0.9 to 1.0	65 to 68 F (18 to 20 C)	feed 150 to 200 ppm				

For additional technical growing information:

LAMI™ [CLICK HERE](#)



 **DANZIGER**

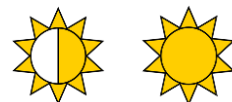
[www.danzigeronline.com](http://www.danzigeronline.com) |   

# LAYLA™

*Lavandula angustifolia*



**LAYLA™  
Presto Blue**



- Cold Hardiness 5 - 9
- No vernalization or cooling required (First Year Flowering)
- Spring flowering response with prolonged flowering into the fall
- Compact upright habit, little to no PGR needed
- Highly fragrant
- Pollinator magnet
- Mature height and width is 33 cm x 38 cm (13 x 15 inches)



**LAYLA™  
Blue**

For additional technical growing information:

LAYLA™ [CLICK HERE](#)



# LAYLA™

Lavandula angustifolia



## PROPAGATION TIPS

- Stick on priority – Number 1 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

36 - 41 cm  
(14 - 16")



Height

30 - 36 cm  
(12 - 14")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible. Utilize callused cuttings to shorten propagation schedule.



K IBA spray application will hasten and even rooting. It is best to root under high humidity and reduce misting application. Pinch is recommended week 4 or at transplant.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.80 to .90	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.80 to .90	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm				
Week 5	5.8 to 6.2	.80 to .90	65 to 68 F (18 to 20 C)	Feed 100 to 150 ppm				Pinch recommended

For additional technical growing information:

LAYLA™ [CLICK HERE](#)





# LAYLA™

Lavandula angustifolia



## FINISHING TIPS

- Maintain evenly moist soil conditions
- Facultative long day plant / long days will hasten flower response
- High light levels and cool temperatures are best for finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
10 to 11 wks	Average Day	Pinch – Suggested day of transplant	100 - 150 ppm N	None required
10 cm (Quart)	(18°C)		Soil EC 0.8 - 1.0 pH 5.8 to 6.2	
11 to 12 wks				
15 cm (1 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR – None required
- Maintain good airflow and allow plants to dry before nightfall
- Scout for Aphids, Leafminors, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
<b>Week 6 Transplant</b>	5.8 to 6.2	0.8 to 1.0	65 to 68 F (18° to 20°C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Phytophthora
<b>Week 6 to 15</b>	5.8 to 6.2	0.8 to 1.0	60 to 65 F (16° to 18°C)	feed 100 to 150 ppm				Spray fungicide application to control Botrytis during finishing

For additional technical growing information:

LAYLA™ [CLICK HERE](#)



# LUCILLE™

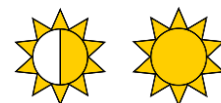
*Leucanthemum superbum*



**LUCILLE™**

**Grace**

Best for 2G / 30-36 cm pots and larger



- Cold Hardiness 4 - 9
- No vernalization or cooling required (First Year Flowering)
- Programable flowering response
- Early spring flower response for Lucille Chic
- Mature height and width is 46 cm x 36 cm (18 x 14 inches)

More varieties in the LUCILLE™ series:



**LUCILLE™ White**

Best for Gallons  
/ 15-18 cm pots



**LUCILLE™ Chic**

Best for Quarts and  
Gallons / 12-18 cm pots

For additional technical growing information:

LUCILLE™ [CLICK HERE](#)



# LUCILLE™

Leucanthemum superbum



## PROPAGATION TIPS

- Stick on priority – Number 3 out of 4 categories



Flowering time  
**Spring / Summer  
Flowering**



Width  
**36 - 41 cm  
(14 - 16")**



Height  
**30 - 51 cm  
(12 - 20")**

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible.



K IBA spray application will hasten and even rooting. Do not over saturate media during propagation.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.80 to .90	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm				
Week 4	5.8 to 6.2	.80 to 1.2	68 to 70 F (20 to 21 C)	Feed 100 ppm				
Week 5	5.8 to 6.2	.80 to 1.2	65 to 68 F (18 to 20 C)	Feed 100 to 150 ppm		Daminozide as needed		Pinch is not required

For additional technical growing information:

LUCILLE™ [CLICK HERE](#)





# LUCILLE™

Leucanthemum superbum



**Lucille Chic – most compact & earliest to flower**

**Lucille White – medium vigor & medium response to flower**

**Lucille Grace – largest vigor & later to flower**

## FINISHING TIPS

- Maintain soil evenly moisture
- Facultative Long Day flowering response
- High light levels best for finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
9 to 10 wks	Average Day	Pinch –None required	100 - 150 ppm N	Daminozide spray application @ 2500 – 3750 ppm
15 cm (1 gallon)	(18°C)			
10 to 11 wks			Soil EC 1.0 - 1.5 pH 5.8 to 6.2	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2500 to 3750 ppm on finished plants early in crop schedule
- Maintain good airflow and allow plants to dry before nightfall
- Scout for Aphids, Leafminors, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	1.0 to 1.2	65° to 68° F (18° to 20°C)	feed 150 to 200 ppm			Drench fungicide after transplant	
Week 6 to 14	5.8 to 6.2	1.0 to 1.5	65° to 68° F (18° to 20°C)	feed 150 to 200 ppm		Daminozide as needed	Control of Pythium & Phytophthora	

For additional technical growing information:

LUCILLE™ [CLICK HERE](#)

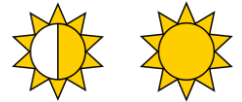


# AMERICAN GOLD RUSH

Rudbeckia hybrid



**AMERICAN GOLD RUSH**



- Cold Hardiness 4 - 9
- No vernalization or cooling required (First Year Flowering)
- Natural late June / early July flowering response
- Mature height and width is 49 cm x 56 cm (24 x 42 inches)

For additional technical growing information:

AMERICAN GOLD RUSH™ [CLICK HERE](#)



# AMERICAN GOLD RUSH

Rudbeckia hybrid



### PROPAGATION TIPS

- Stick on priority – Number 2 out of 4 categories
- Extend the day or night interruption lighting to 12 hours to continue plant growth in short days



Flowering time  
**Summer Flowering**





Width  
**51 - 61 cm (40 - 44")**



Height  
**46 - 50 cm (22 - 26")**

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Optional	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 ppm N	Day of sticking & Week 2

 **Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible

 K-IBA spray application will hasten and even rooting response. American Gold Rush™ is long day flowering with the natural flowering response being late June / early July (facultative long day plant).

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Required 12 hr daylength		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm				
Week 5	5.8 to 6.2	.90 to 1.0	20 to 21 C	Feed 100 to 150 ppm		Daminozide if needed		

For additional technical growing information:

AMERICAN GOLD RUSH™ [CLICK HERE](#)





# AMERICAN GOLD RUSH

Rudbeckia hybrid



## FINISHING TIPS

- No pinch should be needed
- Naturally compact plant habit
- Spray for bacterial leaf blights

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
8 to 10 wks	Average Day	Pinch not required/ extend daylength to 12 hours for continued growth	100 - 150 ppm N	Daminozide spray application @ 2000 – 2500 ppm if needed under low light conditions	
15 cm (1 gallon)	68° to 70° F (20° to 21°C)				
8 to 10 wks	3 plants per container		Soil EC 1.0– 1.5		
20 cm (2 gallon)			pH 5.8 to 6.2		

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	PYRIPROXYFEN, PRMETROZINE, S-KINOPRENE, AZADIRACHTIN, ACEPHATE
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- Long Day Flowering Response Natural flowering time is weeks 26 - 28
- PGR - Spray Daminozide at 2000 to 2500 ppm on finished plants early in crop schedule if needed
- Maintain good airflow and allow plants to dry before nightfall/spray for bacterial leaf blights
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	0.8 to 1.0	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 13	5.8 to 6.2	1.0 to 1.5	68° to 70° F (20° to 21°C)	feed 150 to 200 ppm		Daminozide as needed	Spray fungicide in finishing protocols	Control of Bacterial Leaf Blights

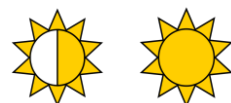
For additional technical growing information:

AMERICAN GOLD RUSH™ [CLICK HERE](#)



# APEX™

Salvia nemorosa



**APEX™**  
White

- Cold Hardiness 4 - 9
- No vernalization or cooling required (First Year Flowering)
- Early spring flowering and continued flowering throughout the summer
- Uniform three color series
- Compact and extremely uniform habit
- Quick to rebloom
- Makes a showy two or three plant mix
- Mature height and width is 35 cm x 30 cm (14 x 12 inches)



**APEX™**  
Pink



**APEX™**  
Blue

For additional technical growing information:

APEX™ [CLICK HERE](#)



# APEX™

Salvia nemorosa



## PROPAGATION TIPS

- Stick on priority – Number 3 out of 4 categories



Flowering time  
Spring / Summer  
Flowering



Width  
30 cm  
(12")



Height  
35 cm  
(14")

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Optional	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 20° - 21° C (68° - 70° F)		Weeks 3-4 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Salvia nemorosa APEX™ are day neutral. K-IBA spray application will hasten and even rooting response. Soft pinch will increase branching but is not necessary.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 72 F (22 / 23 C)	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 72 F (22 / 23 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	68 to 70 F (20 to 21 C)	feed 100 to 150 ppm	None required	Daminozide as needed		Spray at 1500 to 2500 ppm Daminozide

For additional technical growing information:

APEX™ [CLICK HERE](#)





# APEX™

Salvia nemorosa



## FINISHING TIPS

- Cool finishing temperatures will increase quality and longevity of flowers
- Apex™ will rebloom throughout the summer without cutting back plants

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 9 wks	Average Day	Pinch – Optional	150 - 200 ppm N	Spray at 1500 to 2500 ppm Daminozide
10 cm (quart)	(16° to 18°C)			
9 to 11			Soil EC 1.2 – 1.5 pH 5.8 to 6.3	
15 cm (1 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- Cool temperatures during finishing will develop high quality plants
- Maintain good airflow and allow plants to dry before nightfall.
- Scout for Aphids, Spider Mites and Whiteflies
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.3	1.0 to 1.2	60° to 65° F (16° to 18°C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Botrytis
Week 6 to 13	5.8 to 6.3	1.2 to 1.5	60° to 65° F (16° to 18°C)	feed 150 to 200 ppm				

For additional technical growing information:

APEX™ [CLICK HERE](#)

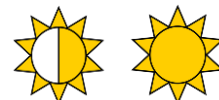


# SALVIA COLLECTION

Salvia nemorosa



**PINK NEBULA™**



- Cold Hardiness 4 - 9
- No vernalization or cooling required (First Year Flowering)
- Dark Matter™ & Pink Nebula™ are unique stand alone varieties with large flowers and larger plant habit
- Mature height and width is 41cm x 41 cm (16 x 16 inches)

More varieties in the SALVIA COLLECTION series:



**DARK MATTER™**



**SALLYROSA™ April Night**

For additional technical growing information:

SALVIA COLLECTION [CLICK HERE](#)



# SALVIA COLLECTION

Salvia nemorosa



## PROPAGATION TIPS

- Stick on priority – Number 3 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

36 - 51 cm  
(14" - 20")



Height

36 - 46 cm  
(14" - 18")

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Optional	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 20° - 21° C (68° - 70° F)		Weeks 3-4 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



Salvia nemorosa collection is day neutral. K-IBA spray application will hasten and even rooting response. Pinch in liner stage or at transplant to increase branching.

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F (22 / 23 C)	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F (22 / 23 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.8 to 6.2	1.0 to 1.2	68 to 70 F (20 to 21 C)	feed 100 to 150 ppm	None required	Daminozide as needed		Pinch - Recommended

For additional technical growing information:

SALVIA COLLECTION [CLICK HERE](#)



[www.danzigeronline.com](http://www.danzigeronline.com) | [YouTube](#) [LinkedIn](#) [Facebook](#)



# SALVIA COLLECTION

Salvia nemorosa



## FINISHING TIPS

- Cool finishing temperatures will increase quality and longevity of flowers
- Dark Matter™ & Pink Nebula™ may require additional PGR applications for quality finishing/it is a larger growing variety.

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 9 wks	Average Day	Pinch – Optional	150 - 200 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
10 cm (quart)	(16° to 18°C)			
9 to 11			Soil EC 1.2 – 1.5 pH 5.8 to 6.3	
15 cm (1 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- Cool temperatures during finishing will develop high quality plants
- Maintain good airflow and allow plants to dry before nightfall.
- Scout for Aphids, Spider Mites and Whiteflies
- Drench after transplant for Botrytis and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.3	1.0 to 1.2	60° to 65° F (16° to 18°C)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Botrytis
Week 6 to 13	5.8 to 6.3	1.2 to 1.5	60° to 65° F (16° to 18°C)	feed 150 to 200 ppm		Dark Matter may require additional applications		Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench

For additional technical growing information:

SALVIA COLLECTION [CLICK HERE](#)

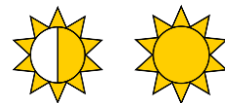


# RONICA™

Veronica spicata



**RONICA™ Blue**



- Cold Hardiness 4 - 9
- No vernalization or cooling required (First Year Flowering)
- Natural June flowering response
- Large and brightly colored flower spikes in summer
- Mature height and width is 35 cm x 41 cm (14 x 16 inches)



**RONICA™ Fuchsia**

For additional technical growing information:

RONICA™ [CLICK HERE](#)



# RONICA™

Veronica spicata



## PROPAGATION TIPS

- Stick on priority – Number 3 out of 4 categories



Flowering time

Spring / Summer  
Flowering



Width

41 - 45 cm  
(16 - 18")



Height

35 - 41 cm  
(14 - 16")

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 18° - 20° C (65° - 68° F)		Weeks 3-5 100 to 125 ppm N	Day of sticking & Week 2



**Irrigation specification** – Spray with adjuvant the day of sticking/Remove from mist as soon as possible



K-IBA spray application will hasten and even rooting response. Veronica Ronica™ are long day flowering with the natural flowering response being June (facultative long day plant).

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	70 / 72 F (21 / 22 C)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	70 / 72 F (21 / 22 C)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F (20 / 21 C)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm		Daminozide as needed		
Week 5	5.8 to 6.2	.90 to 1.0	68 to 70 F (20 to 21 C)	Feed 100 to 150 ppm		Daminozide as needed		

For additional technical growing information:

RONICA™ [CLICK HERE](#)



**DANZIGER**

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# RONICA™

Veronica spicata



## FINISHING TIPS

- Low fertility will reduce plant size and hasten flowering
- Allow soil to dry between irrigations

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
9 to 10 wks	Average Day	Pinch – Suggested day of transplant	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon)	(20° to 21°C)			
11 to 12 wks			Soil EC 0.8 – 1.0 pH 5.8 to 6.2	
20 cm (2 gallon)				

		Recommended Chemicals
Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
	Thrips	METHIOCARB, ACINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium	PROPAMOCARB
	Phytophthora	PROPAMOCARB



- PGR - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule / Paclobutrazol drench application at 1 to 2 ppm for finishing if required
- Maintain good airflow and allow plants to dry before nightfall/spray for Powdery Mildew
- Scout for Aphids, Mites and Whiteflies
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
<b>Week 6 Transplant</b>	5.8 to 6.2	0.8 to 1.0	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
<b>Week 6 to 15</b>	5.8 to 6.2	0.8 to 1.0	68° to 70° F (20° to 21°C)	feed 100 to 150 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

RONICA™ [CLICK HERE](#)

