DANZIGER

PERENNIALS

Technical Product Pages

2027-2028



CELESTIA™

Agastache foeuiculum

1st YEAR Flowering

- First-year-flowering with no vernalization or bulking required
- Sturdy habit covered with fragrant blooms and foliage
- Good rooting performance
- Fast to finish
- Continuous flowering all season long

Spring	27 in 70 cm	21 in 55 cm	Upright Vigorous
15-18 Qt, Gal	Landscape	7-10	Pollinator friendly



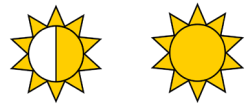
DANZIGER

PROPAGATION TIPS

CELESTIA™

Agastache foeuiculum

For additional information and availability: CELESTIA™



Stick on priority – Number 2 out of 4 categories

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 during propagation.
- Daminozide spray application @ 2500-3750 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	21° / 22° C (70°-72° F)	50 ppm N in mist			Day of sticking	
Week 2	5.6 / 6.3	.80 to .90	21 / 22 C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.6 / 6.3	.90 to 1.0	Cool to 18° - 20° C (65° - 68° F)	Feed 100 ppm to 150 ppm				Pinching
Week 4	5.6 / 6.3	1.0 to 1.2	18° - 20° C (65° - 68° F)	Feed 100 to 150 ppm		Daminozide as needed		

DANZIGER

CELESTIA™

Agastache foeuiculum

For additional information and availability: CELESTIA™

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 – in liner	150 - 200 ppm N	Daminozide spray application @ 2500 – 3750 ppm
15 cm (1 gallon) 1 ppp	(16° to 18° C)			
10 to 12 wks			Soil EC 1.0 - 1.2 pH 5.6 to 6.5	
20 cm (2 gallon) 1 ppp				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	16° to 18° C	Feed 150 to 200 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	16° to 18° C	Feed 150 to 200 ppm				

- 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. 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

'PEACH PEARL' PPAF
'PINK PEARL' PPAF
‘PRINCE’S PLUME’ PPAF
'PARADE OF PARROTS' PPAF

Agastache hybrida

1st YEAR Flowering

- First-year-flowering, no vernalization or bulking required
- Early and uniform bloom
- Re-blooms for color all summer long
- Strong radial branching

Upright	45-50 cm 18-20 in	50-55 cm 20-22 in	Zone 6-10
15-18 Gal+	Landscape		

TERRA NOVA NURSERIES, INC.



Pink Pearl

DANZIGER

'PEACH PEARL' PPAF, **'PINK PEARL'** PPAF, **‘PRINCE’S PLUME’** PPAF **'PARADE OF PARROTS'** PPAF

1st YEAR Flowering



Peach Pearl ***PPAF***



Prince’s Plume ***PPAF***



Pink Pearl ***PPAF***



Parade of parrots ***PPAF***

TERRA NOVA NURSERIES, INC.

DANZIGER

PROPAGATION TIPS

PEACH PEARL, PINK PEARL, PRINCE'S PLUME & PARADE OF PARROTS

Agastache hybrida

For additional information and availability: PEACH PEARL | PINK PEARL | PRINCE'S PLUME | PARADE OF PARROTS

Stick on priority – Number 2 out of 4 categories

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 3-4 100 to 125 ppm	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		

TERRA NOVA NURSERIES, INC. DANZIGER

FINISHING TIPS

PEACH PEARL, PINK PEARL, PRINCE'S PLUME & PARADE OF PARROTS

Agastache Hybrida

For additional information and availability: PEACH PEARL | PINK PEARL | PRINCE'S PLUME | PARADE OF PARROTS

- 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 – in liner	150 - 200 ppm N	Daminozide spray application @ 2500 – 3750 ppm
15 cm (1 gallon) 1 ppp	(16° to 18° C)			
10 to 12 wks			Soil EC 1.0 - 1.2 pH 5.6 to 6.5	
20 cm (2 gallon) 1 ppp				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	16° to 18° C	Feed 150 to 200 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	16° to 18° C	Feed 150 to 200 ppm				

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB / Triflumizole

- 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. 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

TERRA NOVA NURSERIES, INC. DANZIGER

SUNNY SPARKS™

Agastache aurantiace

1st YEAR Flowering

- First-year-flowering with no vernalization or bulking required
- Sturdy habit covered with fragrant blooms
- Fast to finish
- Pollinator friendly

Upright	50 cm 20 in	60 cm 24 in	Heat Tolerant

12-18 Qt, Gal	Landscape	Pollinator Friendly	Spring / Summer Flowering	6-11



DANZIGER

SUNNY SPARKS™ series

1st YEAR Flowering



SUNNY SPARKS™ Amber

AG-23-563



SUNNY SPARKS™ Coral



SUNNY SPARKS™ Punch



SUNNY SPARKS™ Pink Imp.

DANZIGER

SUNNY SPARKS™

Agastache aurantiace

For additional information and availability: SUNNY SPARKS™

PROPAGATION TIPS

Stick on priority – Number 2 out of 4 categories

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 @ 2500-3750 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	5.5 / 6.3	0.80	21° - 22°C (70°-72° F)	50 ppm N in mist			Day of sticking	
Week 2	5.5 to 6.3	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.5 to 6.3	.90 to 1.0	Cool to 18° - 20° C (65° - 68° F)	Feed 100 ppm to 150 ppm				
Week 4	5.5 to 6.3	1.0 to 1.2	18° - 20° C (65° - 68° F)	Feed 100 to 150 ppm		Daminozide as needed		Pinch at transplant

DANZIGER

SUNNY SPARKS™

Agastache aurantiace

For additional information and availability: SUNNY SPARKS™

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 – in liner	150 - 200 ppm N	Daminozide spray application @ 2500 – 3750 ppm
15 cm (1 gallon) 1 ppp	(16° to 18° C)			
10 to 12 wks			Soil EC 1.0 - 1.2 pH 5.6 to 6.5	
20 cm (2 gallon) 1 ppp				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	16° to 18° C	Feed 150 to 200 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	16° to 18° C	Feed 150 to 200 ppm				

- 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. 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

Emerald Charm™

Asarum

- Shiny foliage
- Blooms in both indoor and outdoor applications
- Great option for landscape and combinations
- Suitable also as a perennial pot plant
- Mounded habit



Mounded	10-20 Patio Pots	Landscape	30-40 cm 12-16 in	30-40 cm 12-16 in

DANZIGER

PROPAGATION TIPS

Emerald Charm™

Asarum

For additional information and availability: FLORESTA™ CATALOG

Stick on priority – Number 3 out of 4 categories

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 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 - 4 68° - 70° (20° - 21° C)		Weeks 3-4 100 to 150 ppm N	Apply broad spectrum Week 2

- **Misting specification -** Remove from mist as soon as possible
- Spray adjuvant at sticking

- - Pinching is not needed

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

DANZIGER

Emerald Charm™

For additional information and availability: FLORESTA™ CATALOG

Asarum

- Quality improves when finished with cool temperatures
- Will flower second year around week 8, needs outdoor cold temperatures to flower

FINISHING TIPS

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
10 to 11 wks	Average Day	No pinch necessary	100 - 150 ppm N	Not needed
(12 cm) 5" pot 1 ppp	65° - 68° (18° - 20° C)			
10 to 12 wks	1 plant per pot	No lighting necessary	Soil EC 1.0 - 1.2 pH 5.5 to 6.0	
(15 cm) 6 ½" 1 ppp				
10 to 11 wks				
(20 cm) 8" 3 ppp	3 plants per container			
10 to 12 wks				
(25 cm) 10" 3 ppp	3 plants per container			

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	1.0 to 1.2	65° to 68° F (18° to 20° C)	feed 100 to 150 ppm	Day Neutral	Not needed	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.0	1.0 to 1.2	59° to 64° f (16° to 18° C)	feed 100 to 150 ppm	Not Required			

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

- Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity
- Scout for Aphids and Thrips on a regular basis
- EC guidelines are based on the 2:1 water extraction method

DANZIGER

PAVILION™

Caryopteris incana

1st YEAR Flowering

- First-year-flowering with no vernalization or bulking required
- Blooms from late summer to early fall
- Great novelty for fall programs
- Gives a spot of color in the garden

Autumn	13-15 in 35-40 cm	18-20 in 45-50 cm
12-18 Qt, Gal	Landscape	5-9



PAVILION™ Blue

DANZIGER

PAVILION™ series

1st YEAR Flowering



PAVILION™ White



PAVILION™ Pink



PAVILION™ Blue

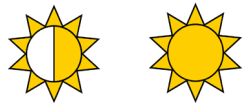
DANZIGER

PROPAGATION TIPS

PAVILION™

Caryopteris incana

For additional information and availability: PAVILION™



Stick on priority – Number 2 out of 4 categories

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 to 150 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 24 to 26 for finishing week 36. Daminozide at 2500 to 37500 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	21° - 22°C (70°-72° F)	50 ppm N in mist			Day of sticking	
Week 2	5.5 / 6.2	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist	Optional		Second fungicide app	
Week 3	5.5 / 6.2	.90 to 1.0	Cool to 18° - 20° C (65°- 68° F)	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed		
Week 4	5.5 / 6.2	1.0 to 1.2	18° - 20° C (65°- 68° F)	Feed 100 to 150 ppm	Optional	Daminozide as needed		Pinching

DANZIGER

FINISHING TIPS

PAVILION™

Caryopteris incana

For additional information and availability: PAVILION™

- 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 8 wks	Average Day	Pinch – in the liner	150 - 200 ppm N	Daminozide spray application @ 2500 – 3750 ppm
15 cm (1 gallon) 1 ppp	(20° to 21° C)			
7 to 9 wks			Soil EC 1.0 - 1.2 pH 5.5 to 6.2	
20 cm (2 gallon) 1 ppp				

- PGR - Spray Daminozide at 2500to 3750 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 and will show as yellow green leaf color
- Scout for Aphids, Mites and Whiteflies
- Drench after transplant for Pythium / Phytophthora and Rhizoctonia.
- Optimal planting period – May-June for fall programs.
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.2	1.0 to 1.2	20° to 21° C	Feed 150 to 200 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 13	5.6 to 6.2	1.0 to 1.2	20° to 21° C	Feed 150 to 200 ppm				

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

SOLANNA™

Coreopsis grandiflora

1st YEAR Flowering

- First-year-flowering with no vernalization or cooling required, however most varieties benefit from 14 days of cool temperature (10C or less)
- Well-branched
- Prolonged flowering, spring to fall
- Self-cleaning

Pollinator Friendly	13-15 in 35-40 cm	20-22 in 50-55 cm	12-18 cm Gal+, Patio Pot	Landscape	4-10

Variety Name	Flower Color	Flower Size	Flower Type	Tolerance to Day Length & High Temp.	Flowering Time |(From Planting)	Growth Habit
Solanna™ Bright Touch	Dark Yellow & Red	Medium	Single	Medium-Low	Late spring	Mounded
Solanna™ Glow	Light Yellow	Medium	Single	Low	Late spring	Semi-Upright
Solanna™ Golden Crown	Yellow	Large	Single	Medium	Spring	Semi-Upright
Solanna™ Golden Sphere	Yellow	Large	Double	Low	Spring	Mounded
Solanna™ Sunset Bright	Yellow & Red	Medium	Single	High	Spring	Mounded
Solanna™ Sunset Burst	Light Red & Light Yellow	Large	Single	High	Late spring	Semi-Upright
Solanna™ Sunshine	Yellow	Extra Large	Semi-Double	Medium	Spring	Semi-Upright



SOLANNA™ Golden Sphere

DANZIGER

SOLANNA™ series

1st YEAR Flowering



SOLANNA™ Bright Touch Imp.
COG-20-3299



SOLANNA™ Golden Crown Imp.
COG-22-3426



SOLANNA™ Glow



SOLANNA™ Golden Sphere



SOLANNA™ Sunset Bright



SOLANNA™ Sunset Burst



SOLANNA™ Sunshine

DANZIGER

PROPAGATION TIPS

SOLANNA™

Coreopsis grandiflora

For additional information and availability: SOLANNA™

Stick on priority – Number 3 out of 4 categories

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 150 ppm N	Day of sticking & Week 2

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

- Daminozide at 2500 to 3750 ppm week 4.

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

DANZIGER

FINISHING TIPS

SOLANNA™

For additional information and availability: SOLANNA™

Coreopsis grandiflora

- Pinching should not be required unless plants have elongated.
  Pinching of SOLANNA™ Sunset Burst and SOLANNA™ Sunset Bright enhance good branching after pinching.
- Spray for Powdery Mildew and bacterial leaf spot during production
- High quality 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 see above	150 - 200 ppm N	Daminozide spray application @ 2500 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon) 1 ppp	20° to 21° C (68°- 70° F)			
9 to 10 wks			Soil EC 1.0 - 1.2 pH 5.6 to 6.2	
20 cm (2 gallon) 1 ppp				

- 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 to hold plants
- Maintain good airflow and allow plants to dry before nightfall. Spray against Powdery Mildew
- Scout for Aphids, Thrips and Whiteflies
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.2	1.0 to 1.2	20° to 21° C (68°- 70° F)	Feed 150 to 200 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 13	5.6 to 6.2	1.0 to 1.2	20° to 21° C (68°- 70° F)	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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

PROPAGATION TIPS

COREOPSIS

verticillate, grandiflora & hybrida

For additional information and availability: COREOPSIS

Stick on priority – Number 3 out of 4 categories

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 –** 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	5.8 to 6.5	0.80	21° - 22°C (70°-72° F)	50 ppm N in mist	Required 12 hours daylength		Day of sticking	
Week 2	5.8 to 6.5	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.5	.90 to 1.0	Cool to 20° - 21°C (68°-70° F)	Feed 100 ppm N				
Week 4	5.8 to 6.5	.90 to 1.0	20° - 21°C (68°-70° F)	Feed 100 ppm N				
Week 5	5.8 to 6.5	.90 to 1.0	18° - 20° C (65°- 68° F)	Feed 100 ppm N		Optional		

TERRA NOVA NURSERIES, INC.

DANZIGER

FINISHING TIPS

COREOPSIS

verticillate, grandiflora & hybrida

For additional information and availability: COREOPSIS

- Pinch required for quality finishing (pinch leaving 4 to 5 nodes)
- Daminozide spray application @ 2000 to 2500 ppm
- Cold beneficial (weeks of night temperatures below 55 F / 13 C)

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch required/ Obligate long day	150-200 ppm N	Daminozide spray application @ 2000 to 2500 ppm
15 cm (1 gallon) 1 ppp	18° - 20° C (65°- 68° F)			
8 to 10 wks			Soil EC 0.8 - 1.0 pH 5.8 to 6.5	
20 cm (2 gallon) 3 plants per container				

- 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

TERRA NOVA NURSERIES, INC. DANZIGER

DELIGHTFUL™

Delosperma cooperi

1st YEAR Flowering

- First-year-flowering, no vernalization or bulking required
- Full of flowers
- Heat and drought tolerance
- Low water consumption
- Mounded compact habit
- Uniform series
- Great option for 12 cm. mix pot

Mounded	8-10 cm 4-6 in	21-25 cm 8-10 in
10-15 cm Qt, Gal	Landscape	Heat Tolerant



DELIGHTFUL™ Pink

DANZIGER

The **DELIGHTFUL™** Collection

1st YEAR Flowering



DELIGHTFUL™ White



DELIGHTFUL™ Pink



DELIGHTFUL™ Yellow

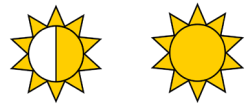
DANZIGER

PROPAGATION TIPS

DELIGHTFUL™

Delosperma cooperi

For additional information and availability: DELIGHTFUL™



Stick on priority – Number 2 out of 4 categories

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 72°/74°F (22°/23°C)	No	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 68° - 70° (20° - 21° C)		Weeks 3-4 100 to 150 ppm	Day of sticking & Week 2

- **Irrigation specification –**As a succulent plant, it requires minimal water. Maintain a microclimate with high humidity while keeping the leaves as dry as possible. Remove from mist as soon as possible

- Delosperma are day neutral and prefer bright light conditions for maximum flowering. Daminozide at 2500 to 3750 ppm week 3 if required.

Rooting	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 to 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 ppm to 150 ppm		Daminozide as needed		

DANZIGER

DELIGHTFUL™

Delosperma cooperi

For additional information and availability: DELIGHTFUL™

FINISHING TIPS

- High quality plants and increased flowering are obtained with high light
- Cool temperatures may create stress and develop yellow stems (at tips)/when temperatures are warm, the plants will remain green
- Maintain soil on drier side

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 @ 2500–3750 ppm
(12 cm) 5” pot 1 ppp	68° to 70° F (20° to 21° C)			
8 to 10 wks			Soil EC 1.2 - 1.5 pH 5.5 to 6.3	
20 cm (2 gallon) 3 ppp				

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				

- 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, Mites and Scale
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

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

DANZIGER

EARLY BIRD™

Delosperma cooperi

1st YEAR Flowering

- First-year-flowering, no vernalization or bulking required
- Heat and drought tolerance
- Low water consumption
- First to open in the morning
- Good flower coverage
- Early blooming



Semi Trailing	10-15 cm	20-25 cm	10-13 Qt, Gal+

Spring	Landscape	4-9

DANZIGER

SPLENDID™

Delosperma cooperi

- Very large bright flowers with white center
- Low water requirements
- Heat tolerance



1st YEAR Flowering

10-13 cm

36-46 cm

4-9

Landscape

DANZIGER

SANDGEM™

Delosperma cooperi

1st YEAR Flowering

- First-year-flowering, no vernalization or bulking required
- Large bright flowers on a tight habit
- Great for landscape use and combinations
- Works well in drought/heat tolerant programs

Semi Trailing	10-13 cm 4-5 in	30-41 cm 12-16 in	15-24 Qt, Gal+	Hanging Basket
Ground cover	Landscape	4-9	Spring / Summer Flowering	



The **SANDGEM™** series

1st YEAR Flowering



Sandgem™
Fuchsia Imp.
DE-Z-61



Sandgem™
Ember Imp.



Sandgem™
Purple



Sandgem™
Yellow

DANZIGER

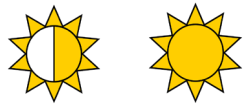
PROPAGATION TIPS

EARLY BIRD™, SANDGEM™ & SPLENDID™

Delosperma cooperi

For additional information and availability: EARLY BIRD™ SANDGEM™ SPLENDID™

Stick on priority – Number 2 out of 4 categories



Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 22° - 23°C (72°-74° 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 150 ppm N	Day of sticking & Week 2

- **Irrigation specification –** Spray with adjuvant the day of sticking/Remove from mist as soon as possible.
  As a succulent plant, it requires minimal water. Maintain a microclimate with high humidity while keeping the leaves as dry as possible.

- Delosperma are day neutral and prefer bright light conditions for maximum flowering. Daminozide at 2500 to 3750 ppm week 3 if required. Pinch in liner tray week 3 to increase branching.

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

DANZIGER

FINISHING TIPS

EARLY BIRD™, SANDGEM™ & SPLENDID™

Delosperma cooperi

For additional information and availability: EARLY BIRD™ SANDGEM™ SPLENDID™

- High-quality plants and increased flowering are obtained with high light
- Cool temperatures may create stress and develop yellow stems (at tips)/when temperatures are warm, the plants will remain green
- Maintain soil on drier side

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) 1 ppp	20° - 21° C (68° - 70° F)			
9 to 11 wks			Soil EC 1.2- 1.5 pH 5.5 to 6.3	
20 cm (2 gallon) 1 ppp				
8 to 10 wks				
20 cm (2 gallon) 3 ppp				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	20° - 21° C (68° - 70° F)	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	20° - 21° C (68° - 70° F)	Feed 100 to 150 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size - if needed		

- 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

DELILAH™

Dianthus plumarius

1st YEAR Flowering

- First-year-flowering with no vernalization or bulking required
- A series of hardy dianthus with semi-double vibrant flowers
- Blooms spring to early fall
- Compact and easy to grow
- No pinching or PGRs required

Spring	25 cm 10 in	35 cm 14 in
12-15 Qt, Gal	Landscape	4-9



DELILAH™ Magenta

DANZIGER

The **DELILAH ™** series



DELILAH™ Shiraz Velvet
DTP-22-8747



DELILAH™ Bicolor Magenta



DELILAH™ Bicolor Purple



DELILAH™ Magenta



DELILAH™ Purple

DANZIGER

PROPAGATION TIPS

DELILAH™

Dianthus plumarius

For additional information and availability: DELILAH™

Stick on priority – Number 3 out of 4 categories

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

Rooting	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 to 6.3	0.80	21° - 22°C (70°-72° F)	50 ppm N in mist	Day neutral		Day of sticking	
Week 2	5.5 to 6.3	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.5 to 6.3	.80 to 1.0	Cool to 20° - 21° C (68° - 70° F)	Feed 100 to 125 ppm				
Week 4	5.5 to 6.3	.80 to 1.0	20° - 21° C (68° - 70° F)	Feed 100 to 125 ppm		Daminozide as needed		Pinch Optional

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

- IBA rooting hormone applications will hasten and improve uniformity of rooting. Daminozide at 2500ppm week 3 if required if the liner is elongated.
- Pinch – is not required unless liners are elongated.
- Spray Ethephon at 300-500 ppm the day after stick. This will reset flowering response. One hour of Ethephon on the leaves will be sufficient time while mist is off.

DANZIGER

FINISHING TIPS

DELILAH™

Dianthus plumarius

For additional information and availability: DELILAH™

- Plants are best finished with high light intensity
- Cool temperature finishing will create the best quality.

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch – Should not be required unless liners are elongated	100 - 150 ppm N	Daminozide spray application @ 2500 ppm
15 cm (1 gallon) 1 ppp	59° to 64°F 15° to 18°C			
9 to 11 wks	Larger containers 3 ppp		Soil EC 1.0 - 1.2 pH 5.5 to 6.3	
20 cm (2 gallon)				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.3	1.0 to 1.2	64°F 18°C	Feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 12	5.5 to 6.3	1.0 to 1.2	59° to 64°F 15° to 18°C	Feed 100 to 150 ppm		Daminozide as needed		When finish to keep the size

- PGR - Spray Daminozide at 2500 ppm on finished plants early in crop schedule if required
- Cool temperatures will finish highest quality plants
- Scout for Aphids, Mites and Thrips
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

GUATEMALA™

Echinacea

1st YEAR Flowering

- First-year-flowering, no vernalization or bulking required
- The 2nd URC Echinacea in the market (1st is the Danziger Panama™ Red)
- Early blooming - weeks 22 to 24
- Everlasting flower power
- Great hardiness
- Suitable for fall programs

Upright/ compact	18cm 7in	26cm 10in	Heat Tolerant
Landscape	10-18 cm Gal+	Pollinator Friendly	Zone 4-9



GUATEMALA™ Gold

DANZIGER

The GUATEMALA™ Series

1st YEAR Flowering



GUATEMALA™ Pink
ECH-Z-92



GUATEMALA™ Gold



GUATEMALA™ Papaya

DANZIGER

PANAMA™

Echinacea

1st YEAR Flowering

- First year Flowering, no vernalization or bulking required
- The 1st URC Echinacea in the market
- Early blooming
  weeks 22 to 24
- Everlasting flower power
- Great hardiness
- Suitable for fall programs

Upright/ Compact	20cm 8in	30cm 12in	Heat Tolerant
Landscape	10-18 cm Gal+	Pollinator Friendly	Zone 4-9



PANAMA™ Red

DANZIGER

The PANAMA ™ Series

1st YEAR Flowering



PANAMA™ Hot Red

ECH-Z-94



PANAMA™ Neon Pink



PANAMA™ Yellow



PANAMA™ Rose



PANAMA™ Red

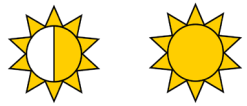
DANZIGER

PROPAGATION TIPS

GUATEMALA™ & PANAMA™

Echinacea hybrid

For additional information and availability: GUATEMALA™ PANAMA™



Stick on priority – Number 2 out of 4 categories

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 150 ppm N	Day of sticking & Week 2

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

- IBA application will hasten and even rooting response. Echinacea Panama™ are long day flowering with the natural flowering response being June (facultative long day plant).
- At least 14-hours daylength and warm temperatures are required during propagation

Rooting	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	21° - 22°C (70°-72° F)	50 ppm N in mist	Required 14 hr Day length		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 18° - 20° C (65° - 68° F)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.90 to 1.0	18° - 20° C (65° - 68° F)	Feed 100 to 150 ppm				Pinching if needed when you have flower stems - pinch
Week 5	5.8 to 6.2	.90 to 1.0	18° - 20° C (65° - 68° F)	Feed 100 to 150 ppm		Daminozide as needed		2500 to 3750 ppm Daminozide

DANZIGER

GUATEMALA™ & PANAMA™

Echinacea hybrid

For additional information and availability: GUATEMALA™ PANAMA™

FINISHING TIPS

- Spray for bacterial leaf blights

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
10 to 12 wks	Average Day	Pinch 3rd to 4th week in liner before transplant.	100 - 150 ppm N	Daminozide spray application @ 2750 – 3750 ppm
15 cm (1 gallon) 1 ppp	(20°C)			
10 to 12 wks	3 plants per container		Soil EC 0.8 - 1.2 pH 5.8 to 6.2	
19 cm (2 gallon) 1 ppp				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	0.8 to 1.0	20° - 21°C (68°-70° F)	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	20° - 21°C (68°-70° F)	Feed 100 to 150 ppm			Spray fungicide in finishing protocols	Control of Bacterial Leaf Blights

- Long Day Flowering Response Natural flowering time is weeks 22 - 24
- Maintain warm temperatures during finishing at 20° C (68° F) average daily temperature to allow continued growth and progression of new leaves
  High light radiation prevents plants from becoming elongated
- PGR - Spray Daminozide at 2500 to 3750 ppm 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

MARVELYS™

Erysimum linifolium

1st YEAR Flowering

- First-year-flowering
- Excellent heat tolerance
- Compact varieties with excellent cold tolerance
- No vernalization or bulking required; cooler growing conditions can enhance overall plant quality.

Upright	35-40 cm 14-16 in	35-45 cm 14-18 in	Heat Tolerant
15-18 Qt, Gal+	Landscape	5-9	



MARVELYS™ Lavender Bliss

DANZIGER

The Marvelys™ series

1st YEAR Flowering



MARVELYS™ Gold

ER-21-620



MARVELYS™ Tropicana

ER-23-732



MARVELYS™ Lavender Bliss

ER-23-799

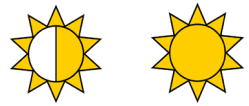
DANZIGER

PROPAGATION TIPS

MARVELYS™

Erysimum linifolium

For additional information and availability: MARVELYS™



Stick on priority – Number 3 out of 4 categories

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Optional - (0.4% IBA)	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 150 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 Marvelys™ series will flower early enough for most regions. Daminozide at 2500 to 3750 ppm week 4. Pinch week 4.

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

DANZIGER

MARVELYS™

Erysimum linifolium

For additional information and availability: MARVELYS™

FINISHING TIPS

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

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch –Suggested week 4 in rooting	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon) 1 ppp	(16°C / 60°F)			
9 to 11 wks	3 plants per container for 20 cm or larger		Soil EC 0.8 - 1.2 pH 5.8 to 6.2	
20 cm (2 gallon) 3 ppp				

- 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
- Scout for Aphids, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 6	5.8 to 6.2	.08 to 1.0	18° - 20° C (65° - 68° F)	Feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 12	5.8 to 6.2	1.0 to 1.4	10° to 16°C (50° - 60° F)	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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

SUNSTRONG™

Erysimum hybrida

1st YEAR Flowering

- First-year-flowering, no vernalization or bulking required
- No cooling needed
- Heat and humidity tolerant
- A large garden plant that consumers will enjoy in their landscape
- Will flower through the season
- Suitable for small pots programs
- Have a nice delicate scent

Upright	38-45 cm 15-18 in	45-60 cm 18-24 in	Zone 6-10	Landscape	10-18 Gal+



SUNSTRONG™ Orange Imp. + Violet

DANZIGER

The SUNSTRONG™ series

1st YEAR Flowering



SUNSTRONG™ Yellow



SUNSTRONG™ Orange Imp.



SUNSTRONG™ Violet

DANZIGER

PROPAGATION TIPS

SUNSTRONG™

Erysimum hybrida

For additional information and availability: SUNSTRONG™

Stick on priority – Number 3 out of 4 categories

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)	Optional - (0.4% IBA)	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 150 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 2500 to 3750 ppm week 4. Pinch week 4.

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

DANZIGER

SUNSTRONG™

Erysimum hybrida

For additional information and availability: SUNSTRONG™

FINISHING TIPS

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

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch – Suggested week 4 in rooting	100 - 150 ppm N	Daminozide spray application @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon) 1 ppp	(16°C / 60°F)			
9 to 11 wks	3 plants per container for 20 cm or larger		Soil EC 0.8 - 1.2 pH 5.8 to 6.2	
20 cm (2 gallon) 3 ppp				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 6	5.8 to 6.2	.08 to 1.0	18° - 20° C (65° - 68° F)	Feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 12	5.8 to 6.2	1.0 to 1.4	10° to 16°C (50° - 60° F)	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

- 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
- Scout for Aphids, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

GUSTO™

Gaillardia hybrida

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Easy to grow, uniform series
- Tested for easy rooting
- New blooms cover the old ones

Mounded	35-40 cm 14-16 in	35-45 cm 14-18 in	15-18 Qt, Gal+
Landscape	4-9	Spring / Summer Flowering	



GUSTO™ Orange Zest

DANZIGER

The **GUSTO™** series

1st YEAR Flowering



GUSTO™ Hot Honey
GI-23-6431



GUSTO™ Swift Saffron



Gusto™ Orange Zest



Gusto™ Lemon



Gusto™ Paprika



Gusto™ Sweet Chili

DANZIGER

PROPAGATION TIPS

GUSTO™

Gaillardia hybrida

For additional information and availability: GUSTO™

Stick on priority – Number 2 out of 4 categories

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°- 21° C (65°- 70° F)		Weeks 3-5 100 to 150 ppm N	Day of sticking & Week 2

- **Irrigation specification –** Spray with adjuvant the day of sticking. Remove from mist as soon as possible.
- Overwet soil will delay rooting and non-uniform callusing
- Gaillardia respond to long days for flowering (obligate long day plant). The Gusto™ series will flower early enough for most regions. Daminozide at 2500 ppm week 3.

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

DANZIGER

GUSTO™

For additional information and availability: GUSTO™

Gaillardia hybrida

FINISHING TIPS

- Allow soil to dry between irrigations

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 9 wks	Average Day	Pinch – before transplant	100 - 150 ppm N	Daminozide spray application @ 2500 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon) 1 ppp	20° - 21°C (68°-70° F)			
9 to 10 wks			Soil EC 1.0 - 1.2 pH 5.8 to 6.2	
20 cm (2 gallon) 1 ppp				
7 to 9 wks				
20 cm (2 gallon) 3 ppp				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	1.0 to 1.2	20° - 21°C (68°-70° F)	Feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophhtora
Week 6 to 13	5.8 to 6.2	1.0 to 1.2	20° - 21°C (68°-70° F)	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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

- 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
- Scout for Aphids, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

DANZIGER

STEFFI™

Gaura

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Medium habit
- Compact flower stems on dense compact foliage

Upright	50 cm 20 in	44 cm 18 in	Heat Tolerant	Zone 5-9

Landscape	12-18 Gal+, Qt



STEFFI™ Dark Rose

DANZIGER

The **STEFFI™** series

1st YEAR Flowering



STEFFI™ Blush Pink Imp.



STEFFI™ Dark Rose Imp.



STEFFI™ White

DANZIGER

PROPAGATION TIPS

STEFFI™

Gaura lindheimeri

For additional information and availability: STEFFI™

Stick on priority – Number 3 out of 4 categories

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 150 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 limiting the amount of moisture in soil.
- Gaura are facultative long day plants/flowering is hastened under long days. Daminozide at 2500 ppm week 4.
- Pinch at week 4 leaving 5 to 6 nodes below pinch.

Rooting	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 to 6.0	0.80	21° - 22°C (70°-72° F)	50 ppm N in mist	Supplemental lighting to 10-12 weeks where needed		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.80 to .90	Cool to 20° - 21°C (68°-70° F)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.80 to .90	20° - 21°C (68°-70° F)	Feed 100 to 150 ppm		Daminozide as needed		Pinch recommended
Week 5	5.8 to 6.2	.80 to .90	18° - 20° C (65° - 68° F)	Feed 100 to 150 ppm		Daminozide as needed		

DANZIGER

STEFFI™

For additional information and availability: STEFFI™

Gaura lindheimeri

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

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch – Suggested week 4 in the linder	100 - 150 ppm N	Daminozide spray application @ 2500 – 3750 ppm
15 cm (1 gallon) 1 ppp	(18°C/65°F)			
9 to 11 wks			Soil EC 0.8 - 1.0 pH 5.8 to 6.2	
20 cm (2 gallon) 1 ppp				
8 to 10 wks				
20 cm (2 gallon) 3 ppp				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	0.8 to 1.0	18° - 20° C (65° - 68° F)	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	16° to 18°C (61° - 65° F)	feed 100 to 150 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size		

- 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, Leaf-miners, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

FESTIVAL™

Gypsophila paniculata

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Great summer performer
- Drought and heat tolerant
- Can be easily cut and put in a vase inside the house

Late Spring	20 in 50 cm	12 in 30 cm	Upright
12-15	Landsape	Hanging basket	4-8

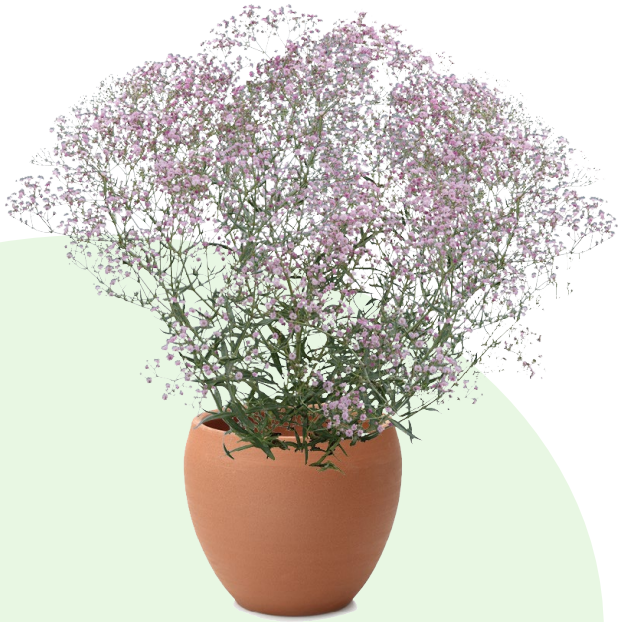


Festival™ White

DANZIGER

FESTIVAL™ series

1st YEAR Flowering



FESTIVAL™ PINK LADY



FESTIVAL™ WHITE



FESTIVAL™ WHITE FLARE

DANZIGER

PROPAGATION TIPS

FESTIVAL™

Gypsophila paniculata

For additional information and availability: FESTIVAL™

Stick on priority – Number 2 out of 4 categories

Average Time	Temperature	Hormone	Fertilization	Fungicide
6 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 20° - 21° C (68° - 70° F)		Weeks 3-5 100 to 150 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.
- A basal IBA application of 200 to 800 ppm is recommended. Overhead application will result in leaf curling and disease issues

Rooting	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 to 6.5	0.80	21° - 22°C (70°-72° F)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.8 to 6.5	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.5	.90 to 1.0	Cool to 20° - 21° C (68° - 70° F)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.5	.90 to 1.0	20° - 21° C (68° - 70° F)	Feed 100 to 150 ppm				
Week 5	5.8 to 6.5	1.0 to 1.2	20° - 21° C (68° - 70° F)	Feed 100 to 150 ppm		Daminozide as needed		Pinching
Week 6	5.8 to 6.5	1.0 to 1.2	20° - 21° C (68° - 70° F)	Feed 100 ppm to 150 ppm		Daminozide as needed		

DANZIGER

FESTIVAL™

For additional information and availability: FESTIVAL™

Gypsophila paniculata

FINISHING TIPS

- Festival Gypsophila will require daylength longer than 12-13 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
9 to 12 wks	Average Day	Pinch – Suggested in week 5 in the liner	150 - 200 ppm N	Daminozide spray application @ 2500 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon) 1 ppp	16° to 18°C (61° - 65° F)			
9 to 12 wks			Soil EC 1.2 - 1.5 pH 5.8 to 6.5	
20 cm (2 gallon) 1 ppp				

- 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
- Pinch leaving 4 to 6 nodes on stem
- Scout for Caterpillar, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora
- Avoid oil-based insecticides such as Neem
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 6	5.8 to 6.5	1.0 to 1.2	16° to 18°C (61° - 65° F)	Feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophhtora
Week 6 to 13	5.8 to 6.5	1.2 to 1.5	16° to 18°C (61° - 65° F)	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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

ENDLESSLILY ™

Hemerocallis

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Ever blooming
- Heat tolerance
- Resilient perennial that returns and flowers every year
- Performs well in landscape and great for patio pots

Mounded	40 cm 16 in	40 cm 16 in	Zone 4-9	Landscape	12-18 Gal+



DANZIGER

The ENDLESSLILY ™ series

1st YEAR Flowering



.ENDLESSLILY ™ Coral Imp



ENDLESSLILY ™ Orange



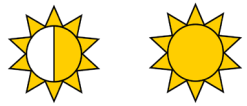
ENDLESSLILY ™ Yellow

DANZIGER

ENDLESSLILY™

For additional information and availability: ENDLESSLILY™

Hemerocallis hybrid



- Transplant into finish pot 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

FINISHING TIPS

Average Time (from bare root)		Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
10 to 12 wks				
(15 cm) 1 gallon (20 cm) 2 gallon	Medium-size division Large division with multiple eyes			

- 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 developed
- Scout for Aphids, Spider Mites and Thrips on regular basis along with Leaf Minors.
- EC guidelines are based on the 2:1 water extraction method

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

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

DANZIGER

KIRA™

Heuchera hybrida

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Beautiful mounding habit
- Excellent heat and drought tolerance
- Works well in quarts (12 cm.) and combinations
- Available as URC, RC and Callus

Spring	25 cm 8 in	30 cm 12 in	4-9
Mounded	12-18 cm Qt, Gal+	Landscape	



DANZIGER

KIRA™ Collection

1st YEAR Flowering



Kira™ Evergreen Forest



Kira™ Green Tea



Kira™ Jersey



Kira™ Arizona



Kira™ Purple Rain Forest Imp.

DANZIGER

PROPAGATION TIPS

KIRA™

Heuchera hybrida

For additional information and availability: Kira™

Stick on priority – Number 2 out of 4 categories

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 and avoid mist and can be watered manually.

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

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

DANZIGER

KIRA™

Heuchera hybrida

For additional information and availability: Kira™

FINISHING TIPS

- Some shade will be required during periods of high light 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) 1 ppp	18° - 20° C (65° - 68° F)			
10 to 12 wks			Soil EC 0.8 - 1.0 pH 5.7 to 6.5	
15 cm (1 gallon) 1 ppp				

- 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
- EC guidelines are based on the 2:1 water extraction method

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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

FIRST FLUSH™

Iberis sempervirens

- First-year-flowering with no bulking or vernalization requirements
- Abundance of flowers
- Takes the heat which extends the selling season for this typically early spring season crop
- Benefits from 14 days of cool temperatures (10C/50F or less) for uniform flowering
- Cold tolerance - suitable for early season programs

Spring	6-8 in 15-20 cm	12-14 in 30-35 cm	Mounded
10-18 Gal+	Landscape	Hanging basket	4-9



FIRST FLUSH™ series



FIRST FLUSH™ GRACE



FIRST FLUSH™ LAVENDER

PROPAGATION TIPS

FIRST FLUSH™

Iberis sempervirens

For additional information and availability: FIRST FLUSH™

Stick on priority – Number 2 out of 4 categories

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 72°/74°F (22°/23°C)	Optional	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 65° - 68° F (18°- 20° C)		Weeks 3-5 100 to 150 ppm N	Day of sticking & Week 2

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

- IBA application will hasten and even rooting.
  It is best to root under high humidity and reduce misting application.
  Allow soil to become moderately dry.
  Pinch if needed in week 4. Daminozide spray application at 2500 ppm 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° (20° - 21° C)	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	.90 to 1.0	68°-70° (20°- 21° C)	Feed 100 to 150 ppm				Pinch optional
Week 5	5.6 to 6.0	1.0 to 1.2	65° - 68° F (18°- 20° C)	Feed 100 to 150 ppm		Daminozide as needed		

DANZIGER

FIRST FLUSH™

Iberis sempervirens

For additional information and availability: FIRST FLUSH™

FINISHING TIPS

- Evenly moist soil conditions is best
- High quality 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 Week 4 or day of transplant	100 - 150 ppm N	Daminozide spray application @ 2500 – 3750 ppm Paclobutrazol at 2 ppm drench
15 cm (1 gallon)	65°F (18°C)		Soil EC 1.0 - 1.2 pH 5.6 to 6.0	
9 to 10 wks				
20 cm (2 gallon)				

- PGR - Spray Daminozide at 2500to 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

Lami™ Dark Purple

Lamium maculatum

1st YEAR Flowering

- First-year-flowering with no vernalization or bulking required
- Early abundant flowering

Summer	6 in 15cm	12 in 25 cm	Semi- Trailing
12-15 Qt, Gal	Landsape	Hanging basket	3-8



DANZIGER

PROPAGATION TIPS

Lami™ Dark Purple

Lamium maculatum

For additional information and availability: Lami™ Dark Purple

Stick on priority – Number 2 out of 4 categories

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 2500 ppm week 3 and/or 5 as required
- Pinch if needed

Rooting	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 to 6.2	0.80	70°-72° F (21° - 22°C)	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.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 65° - 68° (18° - 20° C)	Feed 100 ppm to 125 ppm N		Daminozide as needed		
Week 4	5.8 to 6.2	.90 to 1.0	65° - 68° (18° - 20° C)	Feed 100 to 125 ppm N				Pinch if needed
Week 5	5.8 to 6.2	.90 to 1.0	65° - 68° (18° - 20° C)	Feed 100 to 125 ppm N	None required	Daminozide as needed		

DANZIGER

Lami™ Dark Purple

For additional information and availability: Lami™ Dark Purple

Lamium maculatum

FINISHING TIPS

- 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 – optional	150 - 200 ppm N	To control stretch if finishing warm
(12 cm) 5" pot 1 ppp	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" 1 ppp				

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

- PGR - Spray Daminozide at 2500 to 3750 ppm early on finished plants
- Maintain good airflow and allow plants to dry before nightfall
- Scout for Aphid and Slugs/Snail on a regular basis
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

LAVEANNA™

Lavandula stoechas

- One of the earliest Spanish Lavender to flower in the spring with extended flowering into the heat of summer
- Good branching without pinch
- Improved flowering in both; size and flag
- Provides aromatherapy benefits like stress relief, improved sleep, and relaxation

Mounded

Landscape

12-15 cm
Qt, Gal

Pollinator
Friendly

25-36 cm
10-14 in

30-41 cm
12-16 in

Zone 7-9



LAVEANNA™ Ultra Violet

DANZIGER

The **LAVEANNA™** Series



LAVEANNA™ Ultra Violet



LAVEANNA™ Grand Purple



LAVEANNA™ White Frost

DANZIGER

PROPAGATION TIPS

LAVEANNA™

Lavandula stoechas

For additional information and availability: LAVEANNA™

Stick on priority – Number 1 out of 4 categories

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

- Irrigation specification – Lavender responds best if tented to increase humidity around cuttings versus misting. Do not over-saturate foliage or soil. Remove tenting once roots emerge. Spray adjuvant after sticking. Proper air-movement will help prevent foliage issues.
- Application of IBA can hasten rooting. Daminozide spray application @1500 to 2000 ppm if required. Spray broad spectrum fungicide to prevent foliage diseases.

Rooting	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 to 6.0	0.80	70°-72° F (21° - 22°C)	50 ppm N in mist			Day of sticking	Feeding through Mist
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	5.6 to 6.0	.90 to 1.0	Cool to 65° - 70° (18° - 21° C)	Feed 100 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65° - 70° (18° - 21° C)	Feed 100 ppm				
Week 5	5.6 to 6.0	0.80	65° - 70° (18° - 21° C)	Feed 100 ppm				

DANZIGER

LAVEANNA™

Lavandula stoechas

For additional information and availability: LAVEANNA™

FINISHING TIPS

- Maintain soil on drier side
- Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8 wks	Average Day	Pinch optional No lighting necessary	100 - 150 ppm N	In liner and finish stages
(12 cm) 5" pot	62° - 68° (16° - 20° C)			
8 to 9 wks	1 ppp		Soil EC 1.0 - 1.2 pH 5.8 to 6.2	
(15 cm) 6 ½"				
8 to 9 wks				
(20 cm) 8"	3 plants per container			

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	1.0 to 1.2	62° - 68° (16° - 20° C)	Feed 100 to 150 ppm		Daminozide as needed early in crop	Drench fungicide after transplant	
Week 8 to 10	5.8 to 6.2	1.0 to 1.2	62° - 68° (16° - 20° C)	Feed 100 to 150 ppm	Not Required			Paclobutrazol @ 2 ppm drench when buds showing if growing in warm conditions

- Consistent soil moisture levels are best – allow soil to dry slightly between irrigations
- Scout for Aphids and Spider Mites
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

LAYLA™

Lavandula angustifolia

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Well-branched
- Early to bloom and prolonged flowering spring to fall
- Highly fragrant
- Compact and upright habit, little to no PGR needed
- Provides aromatherapy benefits like stress relief, improved sleep, and relaxation

Upright	**Spring - Fall**	**12-15 cm Qt, Gal**	**Landscape**
30-35 cm 12-14 in	**35-40 cm 14-16 in**	**Zone 6-9**	**Pollinator Friendly**



DANZIGER

The **LAYLA™** series

1st YEAR Flowering



LAYLA™ Encore
LAA-20-153



LAYLA™ Blue



LAYLA™ Presto Blue

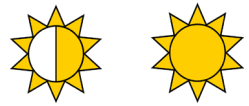
DANZIGER

PROPAGATION TIPS

LAYLA™

Lavandula angustifolia

For additional information and availability: LAYLA™



Stick on priority – Number 1 out of 4 categories

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. It is best to root under high humidity and reduce misting application. Tenting is a great alternative to misting, allowing for drier foliage during propagation. Possibly utilize callused cuttings to shorten propagation schedule.

- IBA application will hasten and even off rooting.
- Pinch is optional if needed in week 4.

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

DANZIGER

FINISHING TIPS

LAYLA™

Lavandula angustifolia

For additional information and availability: LAYLA™

- 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 – optional in the liner	100 - 150 ppm N	None required
10 cm (Quart)	18°C /65° F			
11 to 12 wks	1 plant per pot		Soil EC 0.8 - 1.0 pH 5.8 to 6.2	
15 cm (1 gallon)				

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 6	5.8 to 6.2	.08 to 1.0	18° - 20° C (65° - 68° F)	Feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 13	5.8 to 6.2	0.8 to 1.0	16° - 18° C (61° - 65° F)	Feed 100 to 150 ppm				Spray fungicide application to control Botrytis during finishing

- PGR – None required
  When growing in warmer periods, it might be required –
  Spray Daminozide 2500 ppm .
- Maintain good airflow and allow plants to dry before nightfall
- Scout for Aphids, Leaf-miners, Mites and Thrips
- Drench after transplant for Botrytis and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB,ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

LUCILLE™

Leucanthemum x superbum

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Little to no photoperiodic requirement
- Absolutely no benefit to bulking which allows flexibility in scheduling with no difference in finished product quality when compared to fall production schedule
- Profusion of large single white flowers from early spring through fall

Upright	Spring	12-15 cm Qt, Gal, Patio Pot	Landscape

12cm 12in	25 cm 10 in	Zone 5-9



LUCILLE™ White

DANZIGER

The LUCILLE™ series



LUCILLE™ Grace



LUCILLE™ White



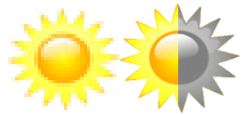
LUCILLE™ Chic

PROPAGATION TIPS

For additional information and availability: LUCILLE™

LUCILLE™

Leucanthemum x superbum



Stick on priority – Number 3 out of 4 categories

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)		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.

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

DANZIGER

FINISHING TIPS

For additional information and availability: LUCILLE™

LUCILLE™

Leucanthemum x superbum

- Maintain soil evenly moisture
- Facultative long day flowering response
- High light levels best for finishing

LUCILLE™ Chic – most compact & earliest to flower

LUCILLE™ White – medium vigor & medium response to flower

LUCILLE™ Grace – largest vigor & later to flower

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
9 to 10 wks	Average Day	Pinch - None required	150 to 200 ppm	Spray Uniconazole 5 to 7 ppm early in crop Paclobutrazol drench application at 1-2 ppm for finishing
15 cm (1 gallon)	18° - 20° C (65° - 68° F)			
10 to 11 wks	1 plant per pot		Soil EC 1.0 - 1.5 pH 5.8 to 6.2	
20 cm (2 gallon)				

- PGR - Spray Uniconazole 5 to 7 ppm early in crop
  Paclobutrazol drench application at 1-2 ppm for finishing
- Spray broad spectrum fungicide after transplant
- Scout for Thrips on a regular basis
- **Do not spray Abamectin (Avid)** on Leucanthemum - test spray any pesticide
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplantto Week 6	5.8 to 6.2	1.0 to 1.2	18° - 20° C (65° - 68° F)	Feed 150 to 200 ppm		Spray Uniconazole 5 to 7 ppm	Drench fungicide after transplant	
Week 6 to 12	5.8 to 6.2	1.0 to 1.5	18° - 20° C (65° - 68° F)	Feed 150 to 200 ppm		Paclobutrazol drench application at 1-2 ppm for finishing	Control of Pythium & Phytophthora	

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

American Gold Rush™

Rudbeckia hybrid

1st YEAR Flowering

- First-year flowering, bulking required
- Deep-yellow blooms and a dark brown center cone
- Long-lasting and prolific flowering
- Heat tolerance
- All American Selections Award Winner
- Available as URC

Upright/ Mounded

Late Summer - Fall

15+ cm Gal+

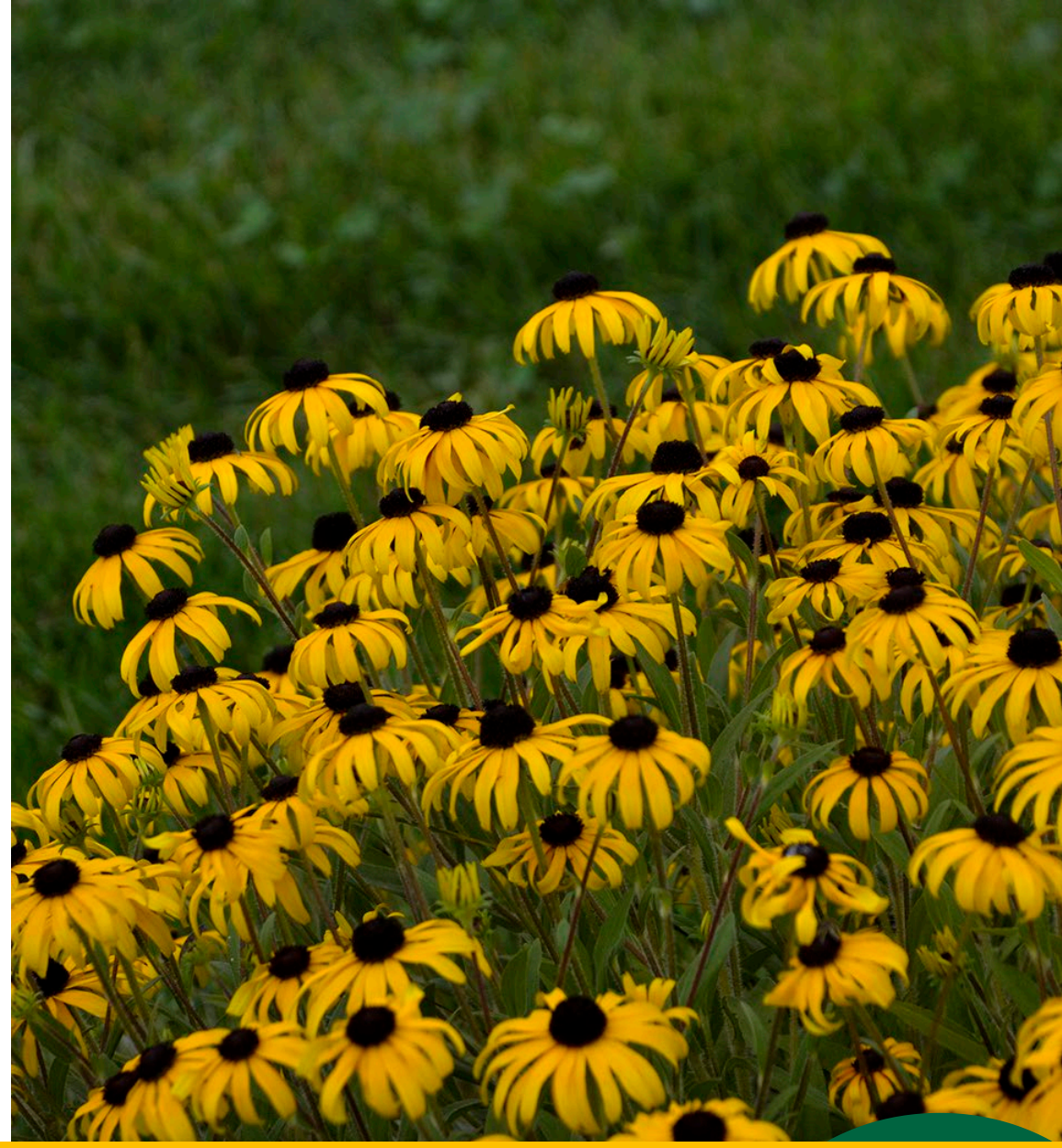
Landscape

60-66 cm 24-26 in

90-100 cm 36-40 in

Zone 4-9

Pollinator Friendly



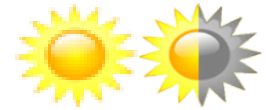
DANZIGER

PROPAGATION TIPS

American Gold Rush™ PP28498 CPBRAF

Rudbeckia hybrid

For additional information and availability: American Gold Rush™



Stick on priority – Number 2 out of 4 categories

Extend the day or night interruption lighting to 12 hours to continue plant growth during short day conditions

Average Time	Temperature	Hormone	Fertilization	Fungicide
5 weeks	Weeks 1 - 2 21° - 22°C (70°-72° F)		Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 5 20° - 21° C (68° - 70° F)		Weeks 3-5 100-150 ppm N	Day of sticking & Week 2

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

- Spray adjuvant at sticking
- American Gold Rush™ is long day flowering with the natural flowering response being late June / early July (obligatory long day plant).

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

DANZIGER

FINISHING TIPS

American Gold Rush™ PP28498 CPBRAF

Rudbeckia hybrid

For additional information and availability: American Gold Rush™

- 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 @ 2500 – 3750 ppm
15 cm (1 gallon) 1 ppp	68° to 70° F (20° to 21°C)			
8 to 10 wks	3 plants per container		Soil EC 1.0 – 1.5 pH 5.8 to 6.2	
24 cm (10 inch)			100 - 200 ppm N	

- Long day flowering response natural flowering time is weeks 26 - 28
- PGR - Spray Daminozide at 2500 to 3750ppm on finished plants 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 6	5.8 to 6.2	0.9 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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

Early Bird Gold™

Rudbeckia hybrid

1st YEAR Flowering

- First-year-flowering with no vernalization or bulking required
- Deep-yellow blooms and a dark brown center cone
- **Key advantage – flowers regardless of day length**
- Long-lasting and prolific flowering
- Heat tolerance
- Available as URC

Upright/ Mounded	**Spring Summer Fall**	**15+ cm Gal+**	**Landscape**
60-66 cm 24-26 in	**90-100 cm 36-40 in**	**Zone 4-9**	**Pollinator Friendly**



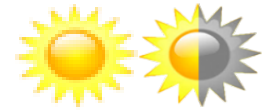
DANZIGER

PROPAGATION TIPS

Early Bird Gold ™

Rudbeckia hybrid

For additional information and availability: Early Bird Gold ™



Stick on priority – Number 2 out of 4 categories

Extended daylength is not required. However, long days result in quicker flowering and better branching

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 20° - 21° C (68° - 70° F)		Weeks 3-5 100 to 150 ppm N	Day of sticking & Week 2

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

- IBA spray application is beneficial to hasten rooting, but is not required.
- Early Bird™ is a facultative long day flowering plant. This means long day will result in quicker flowering, but the plants will finish under short days (facultative long day plant).

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

DANZIGER

FINISHING TIPS

Early Bird Gold ™

Rudbeckia hybrid

For additional information and availability: Early Bird Gold ™

- Long days are not required for flowering
- Spray for bacterial leaf blights

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	Pinch is suggested 4 weeks after sticking.	100 - 150 ppm N	Daminozide spray application @ 2500 – 3750 ppm if needed
15 cm (1 gallon) 1 ppp	68° to 70° F (20° to 21°C)			
			Soil EC 1.0 – 1.5 pH 5.8 to 6.2	
3 plants per pot suggested for size greater than 15cm (1 gallon)		Optional to extend daylength to 12 hours for faster flowering and increased branching	150-200 ppm N	

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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

- Under short day conditions and average daily temperature of 68F (20C) plants finish approximately 16 weeks after stick. Daylength over 12 hours results in flowering 2 weeks faster than short days.
- PGR - Spray Daminozide at 2500 to 3750 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

DANZIGER

APEX™

Salvia nemorosa

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Early and uniform bloom
- Reblooms for color all summer long
- Strong radial branching
- Performs well in heat and humidity

Upright	Spring	12-15 cm Qt, Gal, Patio Pot	Landscape

30 cm 12 in	35 cm 14 in	Zone 4-9



DANZIGER

The APEX™ Series



APEX™ Pink

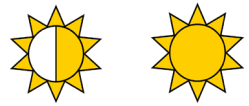


APEX™ Blue

PROPAGATION TIPS

For additional information and availability: APEX™

APEX™
Salvia nemorosa



Stick on priority – Number 3 out of 4 categories

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 22° - 23°C (72°-74° 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. IBA 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 to 6.2	0.80	22° - 23°C (72°-74° F)	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	22° - 23°C (72°-74° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 20° - 21° C (68° - 70° F)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	20° - 21° C (68° - 70° F)	feed 100 to 150 ppm	None required	Daminozide as needed		Spray at 2500 ppm Daminozide

DANZIGER

FINISHING TIPS

APEX™
Salvia nemorosa

- 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 – not needed	150 - 200 ppm N	Spray at 2500 to 3750 ppm Daminozide
10 cm (quart) 1 ppp	16° to 18°C (61°-65° F)			
9 to 11			Soil EC 1.2 – 1.5 pH 5.8 to 6.3	
15 cm (1 gallon) 1 ppp				

- 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 5	5.8 to 6.3	1.0 to 1.2	16° to 18°C (61°-65° F)	Feed 100 to 150 ppm		Daminozide if needed	Drench fungicide after transplant	Control of Pythium & Botrytis
Week 6 to 12	5.8 to 6.3	1.2 to 1.5	16° to 18°C (61°-65° F)	Feed 150 to 200 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size		

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

Salvia Collection

Salvia nemorosa

- First- year-flowering, no vernalization or bulking required
- Early and uniform bloom
- Re-blooms for color all summer long
- Strong radial branching

Upright	45-50 cm 18-20 in	50-55 cm 20-22 in	Zone 4-9

15-18 Gal+	Landscape	Heat tolerant



DANZIGER

The **SALVIA™** Collection

1st YEAR Flowering



Dark Matter™



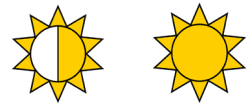
Pink Nebula™

DANZIGER

Dark Matter™ & Pink Nebula™

Salvia nemorosa

For additional information and availability: Dark Matter™ & Pink Nebula™



Stick on priority – umber 3 out of 4 categories

PROPAGATION TIPS

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 22° - 23°C (72°-74° 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 Dark Matter™ & Pink Nebula™ are 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 to 6.2	0.80	22° - 23°C (72°-74° F)	50 ppm N in mist	None required		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	22° - 23°C (72°-74° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 20° - 21° C (68° - 70° F)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	20° - 21° C (68° - 70° F)	Feed 100 to 150 ppm		Daminozide as needed		Spray at 1500 to 2500 ppm Daminozide

DANZIGER

FINISHING TIPS

Dark Matter™ & Pink Nebula™

Salvia nemorosa

For additional information and availability: Dark Matter™ & Pink Nebula™

- 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
8 to 9 wks	Average Day	Pinch – suggested	150 - 200 ppm N	Daminozide spray application @ 2500 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
10 cm (quart) 1 ppp	16° to 18°C (61°-65° F)			
9 to 11			Soil EC 1.2 – 1.5 pH 5.8 to 6.3	
15 cm (1 gallon) 1 ppp				

Finishing	pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 5	5.8 to 6.3	1.0 to 1.2	16° to 18°C (61°-65° F)	feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Botrytis
Week 6 to 12	5.8 to 6.3	1.2 to 1.5	16° to 18°C (61°-65° F)	feed 150 to 200 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size		

- 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
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

SALLYROSA™ April Night

Salvia nemorosa

- First-year-flowering with no bulking or vernalization requirements
- Early and uniform bloom
- Attractive foliage
- Well-branched, strong and radial body
- Treat just like an annual

Spring / Summer Flowering	30 - 41 cm 12 - 14 in	36 - 41 cm 14 -16 in	Zone 4-9



1st YEAR Flowering

DANZIGER

PROPAGATION TIPS

SALLYROSA™ April Night

Salvia nemorosa

For additional information and availability: Sallyrosa™ April Night

Stick on priority – Number 3 out of 4 categories

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 Sallyrosa™ 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	21° - 22°C (70°-72° F)	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 20° - 21° C (68° - 70° F)	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.8 to 6.2	1.0 to 1.2	20° - 21° C (68°- 70° F)	Feed 100 to 150 ppm	None required	Daminozide as needed		Pinch - Recommended
Week 5	5.8 / 6.2	0.80	20°- 21° C (68°- 70° F)	50 ppm N in mist				

DANZIGER

FINISHING TIPS

SALLYROSA™ April Night

Salvia nemorosa

For additional information and availability: Sallyrosa™ April Night

- Cool finishing temperatures will increase quality and longevity of flowers

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 @ 2000 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
10 cm (quart) 1 ppp	(16° to 18°C)			
9 to 11			Soil EC 1.2 – 1.5 pH 5.8 to 6.3	
15 cm (1 gallon) 1 ppp				

- PGR - Spray Uniconazole 5 to 7 ppm early in crop schedule Paclobutrazol drench application at 0.5 ppm for finishing
- Spray broad spectrum fungicide after transplant
- Scout for Thrips on a regular basis
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 5	5.8 to 6.3	1.0 to 1.2	16° to 18°C (61°-65° F)	Feed 100 to 150 ppm			Drench fungicide after transplant	Control of Pythium & Botrytis
Week 6 to 12	5.8 to 6.3	1.2 to 1.5	16° to 18°C (61°-65° F)	Feed 150 to 200 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size		

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER

Ronica™

Veronica spicata

1st YEAR Flowering

- First-year-flowering with no bulking or vernalization requirements
- Compact and highly uniform plants
- Excellent flower canopy without vernalization

Later Spring	14 in 35 cm	16 in 40 cm	Upright
12-15	Landsape	4-9	



RONICA™ Fuchsia

DANZIGER

RONICA™ series



RONICA™ BLUE



RONICA™ FUCHSIA

PROPAGATION TIPS

Ronica™

Veronica longifolia

For additional information and availability: RONICA™

Stick on priority – Number 3 out of 4 categories

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 20° - 21° C (68° - 70° F)		Weeks 3-5 100 to 150 ppm N	Day of sticking & Week 2

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

- IBA 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	5.8 to 6.2	0.80	21° - 22°C (70°-72° F)	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	21° - 22°C (70°-72° F)	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 20° - 21° C (68° - 70° F)	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	.90 to 1.0	20° - 21° C (68° - 70° F)	Feed 100 to 150 ppm		Daminozide as needed		Pinch
Week 5	5.8 to 6.2	1.0 to 1.2	20° - 21° C (68° - 70° F)	Feed 100 to 150 ppm		Daminozide as needed		

DANZIGER

FINISHING TIPS

Ronica™

Veronica longifolia

For additional information and availability: RONICA™

- 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 in week4 in the liner	100 - 150 ppm N	Daminozide spray application @ 2500 – 3750 ppm Paclobutrazol 1 to 2 ppm drench
15 cm (1 gallon) 1 ppp	20° - 21° C (68° - 70° F)			
11 to 12 wks			Soil EC 0.8 - 1.0 pH 5.8 to 6.2	
20 cm (2 gallon) 1 ppp				

- 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 against Powdery Mildew
- Scout for Aphids, Mites and Whiteflies
- Drench after transplant for Rhizoctonia and Pythium / Phytophthora
- PGR applications are based on the label instructions of the commercial product used
- EC guidelines are based on the 2:1 water extraction method

Finishing	pH	EC	Temp.	Feed	Light	PGR	Fungicide	Comments
Transplant to Week 6	5.8 to 6.2	0.8 to 1.0	20° - 21° C (68° - 70° F)	Feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Rhizoctonia
Week 6 to 13	5.8 to 6.2	0.8 to 1.0	20° - 21° C (68° - 70° F)	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

Pests	Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID,DICHLORVOS
	Thrips	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Diseases	Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
	Pythium Phytophthora	PROPAMOCARB / MEFENOXAM
	Rhizoctonia	AZOXYSTRONBIN / ETRIDIAZOLE / FLUDIOXONIL / PCNB

DANZIGER