

# AGUILERA™

Ageratum houstonianum





Aguilera™ Sky Blue



Aguilera™ Violet



- Early flowering time
- Well matched series of 5 colors
- Mature height and width is 10 inches x 12 inches (25cm x 30cm)





# AGUILERA™

Ageratum houstonianum



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Spring / Summer Flowering

Width (10 - 12") 25 - 30 cm

Height (10 - 12") 25 - 30 cm

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



Daminozide at 1500 ppm week 3.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 70 F	Feed 100 ppm to 125 ppm N		Daminozide as needed		
Week 4	5.8 to 6.2	1.0 to 1.2	70 F	feed 100 to 125 ppm N				





### AGUILERA™

Ageratum houstonianum



#### **FINISHING TIPS**

Pinch is optional

Ageratum is a long day plant so extending the day or night interruption will hasten flowering

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 –	150 200 mm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	Optional	150 - 200 ppm N	In liner and	
6 to 8 wks	Weeks 3 – 5	Night interruption	Soil EC 1.0 - 1.2	finish stages as required	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	or extended day- Optional	pH 5.8 to 6.2		

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity PGR - Spray Daminozide at 1500 to 2500 ppm early on finished plants - Paclobutrazol drench application at 1 ppm for finishing if required Maintain good airflow and allow plants to dry before nightfall Scout for Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.7 to 6.2	1.0 to 1.2	65 to 68 f	feed 150 to 200 ppm	optional	Daminozide as needed	Spray fungicide after transplant	
Week 5 to 12	5.7 to 6.2	1.0 to 1.2	65 to 68 f	feed 150 to 200 ppm		Paclobutrazol Drench at 1 ppm		Paclobutrazol 1 ppm drench when plants reach 85% of desired size





Angelonia angustifolia





- Early flowering
- · Good heat tolerance
- · Can be grown in small pots but continues to gain size in the garden
- · Mature height and width is 14 inches x 12 inches (36cm x 30cm) for Alonia and 16 inches x 14 inches (41cm x 36cm) for Alonia Big

More varieties in the ALONIA™ series:



**ALONIA™** Dark Lavender



**ALONIA™ Violet** 



**ALONIA™ Bicolor Violet** 



**ALONIA™ Pink Flirt** 



ALONIA™ Snowball

Sub series BIG with a larger habit:



Grape



ALONIA™ BIG Cherry



ALONIA™ BIG Bicolor Pink Imp.



**ALONIA™ BIG Bicolor Purple** 



**ALONIA™** Big Snow





ALONIA™ Big Dark Pink ALONIA™ Big Indigo







Angelonia angustifolia



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(12 - 14") 30 - 36 cm

(14 - 16") 36 - 41 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 100 to 150 ppm N	Apply broad spectrum Week 2		



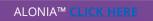
Misting specification - Remove from mist as soon as possible

- Spray adjuvant at sticking



- Maintain warm temperatures allowing plants to develop.
- Spray Daminozide at 1200 to 1500 ppm
- Pinch is recommended week 4 or at transplant

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	72 / 74 F	Feed 100 ppm to 150 ppm	Not required	Daminozide as needed		
Week 4	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F	Feed 100 to 150 ppm	Not required	Daminozide as needed		
Week 5	5.8 to 6.2	1.0 to 1.2	68 F	Feed 100 to 150 ppm	Not required	Daminozide as needed		







Angelonia angustifolia



#### **FINISHING TIPS**

Pinch week 3 in liner or at transplant
Plant liners below new soil to support plants at maturity

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
8 to 9 wks	Average Day	Pinch –Yes	100, 150 and N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Night	100 - 150 ppm N	In liner and	
8 to 10 wks		interruption or extended	Soil EC 1.0 - 1.2	finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	day- Optional	pH 5.5 to 6.0		

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



<u>PGR</u> - Spray Daminozide at 2500 to 3750 ppm for finishing plants Paclobutrazol drench application at 1 to 2 ppm for finishing if required <u>Spray</u> broad spectrum fungicide after transplant <u>Scout</u> for Aphids and Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		B-9 as needed	Spray fungicide after transplant	
Week 6 to	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench if required







# ALONIA<sup>TM</sup> Angelonia angustifolia



### ALONIA™ Dark Lavender - Photos from trials across North America 2020



Atlanta (GA)



Mast Young Plants (MI)



Raker Robertas (MI)



Colorado Sate Univ



Youngs Plant Farm (AL)

Angelonia angustifolia



### ALONIA™ Big Bicolor Purple - Photos from trials across North America 2020



Metrolina Greenhouse (NC)



Colorado Sate Univ



Youngs Plant Farm (AL)



Mast Young Plants (MI)



Raker Robertas (MI)





### $ALONIA^{TM}$

Angelonia angustifolia



### ALONIA™ Big Bicolor Pink - Photos from trials across North America 2020



Metrolina Greenhouse (NC)



Colorado Sate Univ



Youngs Plant Farm (AL)



Mast Young Plants (MI)



Raker Robertas (MI)





# ANGELIC™

Argyranthemum frutescens









- Well matched series of 5 colors
- Mature height and width is 12 inches x 14 inches (30cm x 36cm)



MAIZE™ Imp

#### More varieties in the ANGELIC™ series:



ANGELIC™ Burgundy



**ANGELIC™ Giant Pink** 



ANGELIC™ Lemon Pastel



**SUNNY SPRING™** 



 $\textbf{EVEREST}^{\text{\tiny{TM}}}$ 



**ANGELIC™** Ruby



Mars™



NEPTUNE™





# ANGELIC™

Argyranthemum frutescens



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Spring / Summer Flowering

Width (12 - 14") 30 - 36 cm

Height (12 - 14") 30 - 36 cm

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



Light in propagation for optimal growth and to hasten crop time. Argyranthemum respond to long days for flowering. Daminozide at 750 ppm week 3.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.0	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.0	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.8 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		





## ANGELIC™

Argyranthemum frutescens



#### **FINISHING TIPS**

Pinch is optional

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 –	100, 150 and N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	Optional	100 - 150 ppm N	la lia sa sa d	
8 to 9 wks	Weeks 3 – 5	Night interruption	Soil EC 1.0 - 1.2	In liner and finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	or extended day- Optional	pH 5.5 to 6.0		

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity PGR - Spray Daminozide at 750 to 2000 ppm on young finished plants Paclobutrazol drench application at 1 ppm for finishing if required Maintain good airflow and allow plants to dry before nightfall

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.7 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 5 to 13	5.7 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not Require d	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

Scout for Thrip on regular basis





# LOLLIES™

Argyranthemum frutescens







- Early flowering time
- Well matched series of 5 colors
- Mature height and width is 12 inches x 14 inches (30cm x 36cm)

**LOLLIES™ Berry Gummy** 

More varieties in the LOLLIES™ series:



LOLLIES™ Pink Pez



LOLLIES™ Buttermint



LOLLIES™ White Chocolate



LOLLIES™ Marshmallow





# **LOLLIES<sup>TM</sup>**

Argyranthemum frutescens



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Spring / Summer Flowering Width (12 - 14") 30 - 36 cm

Height (12 - 14") 30 - 36 cm

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



Light in propagation for optimal growth and to hasten crop time. Argyranthemum respond to long days for flowering. Daminozide at 750 ppm week 3.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.0	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.0	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.8 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		





## LOLLIES™

Argyranthemum frutescens



#### **FINISHING TIPS**

Pinch is optional

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 –	100, 150 and N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	Optional	100 - 150 ppm N	la lia sa sa d	
8 to 9 wks	Weeks 3 – 5	Night interruption	Soil EC 1.0 - 1.2	In liner and finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	or extended day- Optional	pH 5.5 to 6.0		

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity PGR - Spray Daminozide at 750 to 2000 ppm on young finished plants Paclobutrazol drench application at 1 ppm for finishing if required Maintain good airflow and allow plants to dry before nightfall

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.7 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 5 to 13	5.7 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not Require d	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

For additional technical growing information:

Scout for Thrip on regular basis





# LOLLIES™

Argyranthemum frutescens



### **LOLLIES™- Photos from trials across Israel & North America**





Israel 2020

HeadStart 2021







Raker 2022







Israel 2020







### SCOPIA® GULLIVER™

Bacopa / Sutera









SCOPIA® GULLIVER™ Pink

- · Large flower size
- Well branched genetics
- Full spectrum of colors
- Great product for combinations

#### More varieties in the GULLIVER™ series:



SCOPIA® GULLIVER™ White Improved



SCOPIA® GULLIVER™ Dynamic White



SCOPIA® GULLIVER™ Violet



SCOPIA® GULLIVER™ Blue Sensation



SCOPIA® GULLIVER™ Blue



SCOPIA® GULLIVER™ Pink Heart Improved





### SCOPIA GULLIVER™

Bacopa / Sutera



#### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(15 - 17") 35 - 40 cm (4 -6") 10 - 15 cm

Average Time	Temperature Hormon		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 - 5 65° - 68° (18° - 20° C)		Weeks 3-5 100 to 150 ppm N	Day of sticking & Week 2



Irrigation specification - Remove from mist as soon as possible to avoid leaf disease issues.



Daminozide at 1500 ppm day of sticking. The Scopia Gulliver™ Series is well branched so no pinch should be required. Spray fungicide to control leaf diseases.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	72 / 74 F	50 ppm N in mist		Day of sticking	Day of sticking	
Week 2	5.6 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.2	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide if needed		







### SCOPIA GULLIVER™

Bacopa / Sutera



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Consistent soil moisture is best to maximize root structure and plant health Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	Pinch /	100 150 mm N	
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Optional	100 - 150 ppm N	Spray application of Daminozide if required
8 to 9 wks		No lighting	Soil EC 0.8 - 1.0	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	necessary	pH 5.6 to 6.2	
8 to 9 wks				
(20 cm) 8"	3 plants per container			
8 to 9 wks				
(25 cm) 10"	3 plants per container			

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



Consistent soil moisture levels are best – allow soil to dry slightly between irrigations Fungicide applications and good air movement to reduce disease pressures Scout for Aphids on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	0.8 to 1.0	65 to 68	feed 100 to 150 ppm	Day Neutral	Daminozide spray application if needed	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.0	0.8 to 1.0	65 to 68	feed 100 to 150 ppm	Not Required			





# SCOPIA® GULLIVER™ COMPACT

Bacopa / Sutera







SCOPIA® GULLIVER™ Compact Rosa

- More compact varieties of Danziger's well known Scopia Gulliver™ Bacopa
- Full color spectrum including Purple, Rosa and White

More varieties in the SCOPIA® GULLIVER™ Compact series:



SCOPIA® GULLIVER™ Compact Blush



SCOPIA® GULLIVER™ Compact White



SCOPIA® GULLIVER™ Compact Purple





## SCOPIA® GULLIVER™ **COMPACT**

Bacopa / Sutera



#### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(10 - 14")

(4 -6") 24 - 36 cm 10 - 15 cm

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 - 5 65° - 68° (18° - 20° C)		Weeks 3-5 100 to 150 ppm N	Day of sticking & Week 2



Irrigation specification - Remove from mist as soon as possible to avoid leaf disease issues.



Daminozide at 1500 ppm day of sticking. The Scopia Gulliver™ Compact Series is well branched. Spray fungicide to control leaf diseases.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	72 / 74 F	50 ppm N in mist		Day of sticking	Day of sticking	
Week 2	5.6 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.2	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide if needed		





# SCOPIA® GULLIVER™ COMPACT

Bacopa / Sutera



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Maintain soil moisture at medium level to maximize root structure Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	Pinch /	100 150 mm N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Optional	100 - 150 ppm N	Spray application of Daminozide if required	
8 to 9 wks		No lighting	Soil EC 0.8 - 1.0		
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	necessary	pH 5.6 to 6.2		
8 to 9 wks					
(20 cm) 8"	3 plants per container				
8 to 9 wks					
(25 cm) 10"	3 plants per container				

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



<u>Consistent soil moisture levels are best</u> – allow soil to dry slightly between irrigations Fungicide applications and good air movement to reduce disease pressures Scout for Aphids on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	0.8 to 1.0	65 to 68	feed 100 to 150 ppm	Day Neutral	Daminozide spray application if needed	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.0	0.8 to 1.0	65 to 68	feed 100 to 150 ppm	Not Required			





## **DOUBLET™**

Begonia semperflorens





**DOUBLET™** White





- Early flower response
- · Well matched series of 4 colors
- Good branching
- Mature height and width is 14 inches x 10 inches (36cm x 25cm)

More varieties in the DOUBLET™ series:



Doublet™ Red



**Doublet™ Rose** 



**Doublet™ Pink** 





# **DOUBLET™**

Begonia semperflorens



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories



Flowering time

Spring / Summer **Flowering** 



Width (8 - 10")

20 - 24 cm



Height

(12 - 14") 30 - 36 cm

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



Irrigation specification - Remove from mist as soon as possible



Drying of cuttings during rooting will extend days to full rooted liner. In propagation, maintain uniform moisture levels

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 / 6.2	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.5 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.7 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm N				
Week 4	5.7 to 6.2	0.9 to 1.0	68 F	feed 100 ppm N				





### DOUBLET™

Begonia semperflorens



#### **FINISHING TIPS**

Do not pinch Begonia Doublets Extremely high light conditions and excessive drying will damage leaves during propagation opening the plant system for Botrytis.

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
5 to 7 wks	Average Day		400 450 N	
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	No pinch	100 - 150 ppm N	at 750 to
6 to 8 wks		should be required	Soil EC 1.0 - 1.2	1,500 PPM
(15 cm) 6 ½"			pH 5.7 to 6.2	

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



<u>Plant growth is based</u> on moisture levels, temperatures and feed rates. Lower temperatures, lower soil moisture levels and lower feed rates will slow growth and finish a more compact plant.

<u>Drench fungicide</u> to prevent Rhizoctonia and other water mold diseased - Maintain good airflow and allow plants to dry before nightfall

Scout for Whitefly, Thrips and Mealybug

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.7 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Day Neutral	at 750 to 1,500 PPM	Spray fungicide after transplant	
Week 5 to 12	5.7 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





# TIMELESS™ COLLECTION

Bidens ferulifolia







Blazing Star™

- · Needs little to no PGR
- The new Blazing Star<sup>™</sup> has a distinct color pattern
- Well suited for quart (12 cm) programs

### COMPACT UPRIGHT





Blazing Embers™

### Yellow Crown™

### UPRIGHT





Golden Empire™

White Delight ™ Imp.





Pretty In Pink™ Imp.

Sunshine Double™

#### MOUNDED/SEMI-TRAILING





Blazing Glory™

Yellow Charm™

### MOUNDED





Blazing Fire™

Blazing Ring of Fire™







Blazing Volcano™

Mega Charm™

Yellow Sunshine™







### BIDENS™

Bidens ferulifolia



#### **PROPAGATION TIPS**

Stick on priority – Number 4 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering (8 - 14") 20 - 36 cm (6 - 14") 15 - 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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



Apply broad spectrum fungicide the day of sticking to control leaf disease. For the more vigorous varieties, apply Daminozide spray at 1500 ppm week 3.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.8 to 6.2	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		





### **BIDENS™**

Bidens ferulifolia



#### **FINISHING TIPS**

Pinch is optional, possibly on more vigorous varieties Cool temperature finishing for best quality and optimum flower color

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 8 wks	Average Day	Pinch –	100, 200 mm N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Recommended	100 - 200 ppm N	Daminozide at 1500 to	
7 to 9 wks		Not Required –	Soil EC 1.0 - 1.2	2500 ppm on more vigorous varieties	
(15 cm) 6 ½"	1 ррр	Day Neutral	pH 5.8 to 6.2		
7 to 9 wks	2				
(20 cm) 8"	3 ppp				

Aphids	ACETAMIPRID, FLONICAMID, IMIDACLOPRID, DICHLORVOS
Thrip	METHIOCARB, ACRINATHRIN, ABAMECTIN, DICHLORVOS, SPINOSAD
Botrytis	CYPRODINIL+FLUDIOXONIL, IPRODIONE, POLYOXIN
Pythium	PROPAMOCARB
Phytophthora	PROPAMOCARB
Rhizoctonia	QUINTOZENE, TOLCLOFOS METHYL
	Thrip Botrytis Pythium Phytophthora



<u>PGR</u> - Spray Daminozide at 1500 to 2500 ppm on young finished plants - Paclobutrazol drench application at 1 ppm for finishing if required for the more vigorous varieties <u>Maintain good airflow</u> and allow plants to dry before nightfall. Drench for protection against Rhizoctonia after transplant and again during finishing stage. Scout for Aphids & Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not require d	Daminozide as needed 1500 to 2500 ppm	Spray fungicide after transplant	
Week 6 to 12	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 200 ppm	Not require d	Paclobutrazol Drench at 1 ppm if needed		Paclobutrazol 1 ppm drench when plants reach 85% of desired size





TIMELESS™ COLLECTION

## BIDENS™

Bidens ferulifolia



Israel, 2022



Konklin, 2022





Israel, 2022









Brachyscome angustifolia









- Large flowers
- Perfect for combinations
- Easy in propagation
- Mounded habit is well suited for hanging baskets and window boxes

### More varieties in the FRESCO™ series:

EU & ROW



FRESCO™ Candy



**FRESCO™** Purple





Brachyscome angustifolia



#### **PROPAGATION TIPS**

Stick on priority - Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(8 - 10") 20 - 25 cm (6 - 8") 15 - 20 cm

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 - 5 68° (18° C)		Weeks 3-5 75 to 100 ppm N	Day of sticking & Week 2	



Irrigation specification - Remove from mist as soon as possible



High light and warm temperatures will maintain a good proportion of flowers to foliage. Maintain lower EC levels for best growth and flower size since higher EC will hinder plant quality.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.6 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist		750 ppm Daminozide	Second fungicide app	
Week 3	5.6 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.6 to 6.2	.90 to 1.0	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		





Brachyscome angustifolia



#### **FINISHING TIPS**

Pinch week 3 in the liner or at transplant Monitor EC levels so they are not elevated Do not over irrigate early in plant finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator		
6 to 8 wks	Average Day	Pinch	100, 150 mm N	In liner and		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	No lighting	100 - 150 ppm N			
8 to 10 wks	Weeks 3 – 5	No lighting required for	Soil EC 0.8 - 1.0	finish stages		
(15 cm) 6 ½"	61° - 68° (16° - 20° C)	flowering	pH 5.6 to 6.2			

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



<u>Avoid</u> covering plant meristem at transplant

<u>Additional</u> Iron (Fe) or Manganese (Mn) may be required, depending on water quality

<u>PGR</u> - Spray Daminozide at 750 to 2000 ppm on young & finished plants

<u>Maintain good airflow</u> and allow plants to dry before nightfall

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.6 to 6.2	0.8 to 1.0	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 5 to 13	5.6 to 6.2	0.8 to 1.0	65 to 68 f	feed 100 to 150 ppm	Not Required			





Brachyscome angustifolia



LVG Bad Zwischenahn, 2022



Israel, 2021



Israel, 2019





Flower trials 2022

Flower trials 2022





# CHEERS<sup>TM</sup> Calendula hybrida





**CHEERS™** Tangerine



**CHEERS™ Yellow** 



Large flowered varieties
Both heat and cold tolerant
Flowers are edible
Mature Height and Width is
10" X 16" (25cm x 40cm)

### Cheers™

Calendula hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer **Flowering** 

(13 - 16")

(10 - 14")32 - 40 cm 25 - 36 cm

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



Irrigation specification - Remove from mist as soon as possible. As soon as possible, Reduce mist heading into evening conditions to reduce disease pressures.



Application of K-IBA can hasten rooting. Daminozide at 1200 ppm day of sticking.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.7 / 6.3	0.80	72 / 74 F	50 ppm N in mist		Daminozide day of sticking	Day of sticking	
Week 2	5.7 to 6.3	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.7 to 6.3	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.7 to 6.3	1.0 to 1.2	68 F	Feed 100 ppm to 150 ppm				
Week 5	5.7 to 6.3	1.0 to 1.2	68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		





### CHEERS™

Calendula hybrida



### **FINISHING TIPS**

Pinch is not required

Cool temperature finishing 50° to 55° F (10° to 13° C) nights for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8 wks	Average Day	No pinch	150 200 nnm N	
(12 cm) 5" pot	60° - 65° (15° - 18° C)	necessary	150 - 200 ppm N	Daminozide at 2,000 to 2,500 ppm spray applications
8 to 9 wks	CO° CE° (4E° 40° C)	No lighting	Soil EC 1.0 - 1.5 pH 5.7 to 6.3	
(15 cm) 6 ½"	60° - 65° (15° - 18° C)	necessary		
8 to 9 wks				
(20 cm) 8"	3 plants per container			

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity

Scout for Aphids and Thrips on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.7 to 6.3	1.0 to 1.2	60 to 65 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 6 to 12	5.7 to 6.3	1.0 to 1.5	60 to 65 f	feed 150 to 200 ppm	Not Required	Paclobutrazol Drench at 1 ppm		Paclobutrazol 1 ppm drench when plants reach 85% of desired size



Calibrachoa hybrida





· Early flowering, compact habit



- · Perfect for small pot production and tidy baskets
- · Tested and selected for pH sensitivity
- Blooms in a 10 hour day
- · Mature height and width is 10 inches x 12 inches (25cm x 30cm)



**COLIBRI™ Tangerine** 



**COLIBRI™ Exotic Red Bling** 





**COLIBRI™ Dark Lavender** 



More varieties in the COLIBRI™ series:

COLIBRI™ **Pure White** 



COLIBRI™ **Abstract Guava** 



COLIBRI™ **Pink Bling** 



COLIBRI™ **Purple Bling** 



COLIBRI™ **Bright Red** 



COLIBRI™ Blizzard



**COLIBRI™ Cherry Lace** 





COLIBRI™ Lemon



**COLIBRI™** Malibu Pink



COLIBRI™ Orange



COLIBRI™ **Pink Flamingo** 



COLIBRI™ **Mellow Yellow** 



**COLIBRI™ Pink Lace** 



COLIBRI™ Plum



**COLIBRI™ Purple Lace** 



**COLIBRI™ Yellow Canary** 



COLIBRI™



COLIBRI™



COLIBRI™ Double Copper Double Deep Purple Double Violet

EU & ROW **ONLY** 

EU & ROW ONLY EU & ROW ONLY







Calibrachoa hybrida



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer (10 - 12") **Flowering** 

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

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 150 ppm N	Day of sticking & Week 2



Irrigation specification - Remove from mist as soon as possible



Application of K-IBA can hasten rooting. Light in propagation for optimal growth and to hasten crop time. Daminozide at 1200 ppm day of sticking.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.2 / 5.8	0.80	72 / 74 F	50 ppm N in mist		Day of sticking 1200 ppm Daminozide	Day of sticking	Feeding through Mist
Week 2	5.2 to 5.8	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.2 to 5.8	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 5	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed		





Calibrachoa hybrida



### **FINISHING TIPS**

Pinch is optional

Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
7 to 8 wks	Average Day	No pinch	100 150 mm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	necessary	100 - 150 ppm N	In liner and	
8 to 9 wks	Weeks 3 – 5	No lighting	Soil EC 1.0 - 1.2	finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	necessary	pH 5.5 to 6.0		
8 to 10 wks					
(20 cm) 8"	3 plants per container				
8 to 10 wks					
(25 cm) 10"	3 plants per container				

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



<u>Additional Iron (Fe) or Manganese (Mn)</u> may be required depending on water quality and alkalinity Scout for Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not Require d	Paclobutrazol Drench at 1 ppm		Paclobutrazol 1 ppm drench when plants reach 85% of desired size





Calibrachoa hybrida















Calibrachoa hybrida















### **EYECONIC™**

Calibrachoa hybrida









**EYECONIC™** Pink

Selected for eye type color pattern on large blooms
Makes a showy basket and works well in combinations
Flowers in a 10-hour day
Tested for pH sensitivity
Mature Height and Width is
12" X 14" (30cm x 36cm)

#### More varieties in the EYECONIC™ series:



EYECONIC™ Apricot



EYECONIC™ Peach



EYECONIC™ Compact Sunset



EYECONIC™ Cherry Blossom



EYECONIC™ Purple



EYECONIC™ Strawberry





### **EYECONIC™**

Calibrachoa hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer (12 - 14") **Flowering** 

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

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 150 ppm N	Day of sticking & Week 2



Irrigation specification - Remove from mist as soon as possible



Application of K-IBA can hasten rooting. Light in propagation for optimal growth and to hasten crop time. Daminozide at 1200 to 1500 ppm day of sticking. Daminozide plus Uniconazole-P tank mix week 3 to control stretch if needed.

Rooting	pН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.2 / 5.8	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.2 to 5.8	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.2 to 5.8	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 5	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		







### **EYECONIC™**

Calibrachoa hybrida



### **FINISHING TIPS**

Pinch is optional

Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
7 to 8 wks	Average Day	No pinch	100, 150 mm N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	necessary	100 - 150 ppm N	In liner and	
8 to 9 wks		No lighting	Soil EC 1.0 - 1.2	finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	necessary	pH 5.5 to 6.0		
8 to 9 wks					
(20 cm) 8"	3 plants per container				
8 to 9 wks					
(25 cm) 10"	3 plants per container				

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity Scout for Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





## **EYECONIC<sup>TM</sup>**

Calibrachoa hybrida



Konklin, 2022



Sawaya Waterford, 2022



Konklin, 2022

MYP, 2022





# LIATM

### Calibrachoa hybrida







**LIA™ Violet** 

· Selected for basket production

- Blooms in a 10 hour day
- Tested for pH sensitivity
- Mature height and width
   12 inches x 14 inches (30cm x 36cm)



LIA™ Spark Pink





LIA™ Yellow Imp,



LIA™ Abstract Pink



**LIA™ Cranberry** 



LIA™ Blue



LIA™ Bubblegum`



LIA™ Dark Red



LIA™ Glaze



LIA™ Melon



LIA™ Raspberry



LIA™ Amethyst Bling

EU & ROW







### Calibrachoa hybrida



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer **Flowering** 

(12 - 14")

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

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 150 ppm N	Day of sticking & Week 2



Irrigation specification - Remove from mist as soon as possible



Application of K-IBA can hasten rooting. Light in propagation for optimal growth and to hasten crop time. Daminozide at 1200 to 1500 ppm day of sticking. Daminozide plus Uniconazole-P tank mix week 3 to control stretch if needed.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.2 / 5.8	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	Feeding through Mist
Week 2	5.2 to 5.8	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.2 to 5.8	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 5	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed	Week 5	





### $\mathsf{LIA}^{\mathsf{TM}}$

### Calibrachoa hybrida



### **FINISHING TIPS**

Pinch is optional

Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
7 to 8 wks	Average Day	No pinch	100, 150 ppm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	necessary	100 - 150 ppm N	In liner and	
8 to 9 wks	Weeks 3 – 5	No lighting	Soil EC 1.0 - 1.2	finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	necessary	pH 5.5 to 6.0		
8 to 9 wks					
(20 cm) 8"					
8 to 9 wks	8 to 9 wks				
(25 cm) 10"	3 plants per container				

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



<u>Additional Iron (Fe) or Manganese (Mn)</u> may be required depending on water quality and alkalinity Scout for Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 6 to 13	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





# LIA<sup>TM</sup> Calibrachoa hybrida



# Sawaya Waterford 2022

















Calibrachoa hybrida









**OMBRE™ Purple** 

- · A range of colors on each plant
- Medium Vigor and a controlled semi-trailing habit
- Blooms early enough for any market
- · Tested for pH sensitivity
- Mature height and width 12 inches x 14 inches (30cm x 36cm)

### More varieties in the OMBRE™ series:



OMBRE™ Sunrise



OMBRE™ Blue



OMBRE™ Pink



OMBRE™ Yellow





Calibrachoa hybrida



### **PROPAGATION TIPS**

Stick on priority - Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer **Flowering** 

(12 - 14")

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

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 150 ppm N	Day of sticking & Week 2



Irrigation specification - Remove from mist as soon as possible



Application of K-IBA can hasten rooting. Light in propagation for optimal growth and to hasten crop time. Daminozide at 1200 to 1500 ppm day of sticking. Daminozide plus Uniconazole-P tank mix week 3 to control stretch if needed.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.2 / 5.8	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	Feeding through Mist
Week 2	5.2 to 5.8	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.2 to 5.8	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 5	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed		





Calibrachoa hybrida



### **FINISHING TIPS**

Pinch is optional

Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
7 to 8 wks	Average Day	No pinch	100 150 mm N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	necessary	100 - 150 ppm N	In liner and	
8 to 9 wks		No lighting	Soil EC 1.0 - 1.2	finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	necessary	pH 5.5 to 6.0		
8 to 9 wks					
(20 cm) 8"	3 plants per container				
8 to 9 wks					
(25 cm) 10"	3 plants per container				

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



<u>Additional Iron (Fe) or Manganese (Mn)</u> may be required depending on water quality and alkalinity Scout for Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





Calibrachoa hybrida



OMBRE™ Pink - Photos from trials across North America 2020



Mast Young Plants (MI)

Head Start Nursery (CA)



Metrolina Greenhouses (NC)



Calibrachoa hybrida



OMBRE™ Blue - Photos from trials across North America 2020



**Plants** 



Head Start Nursery (CA)



Metrolina Greenhouses (NC)









Calibrachoa hybrida











# CLIO<sup>TM</sup> Cleome hybrida





**CLIO™** Magenta



**CLIO™** Pink Lady



- Seed sterile
- Summer performer with continuous flowering
- · Ideal garden product
- Mature height and width is
   60 cm x 42 cm (24 x 16 inches)





# Cleome hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories



Flowering time

Spring / Summer **Flowering** 



Width 32 - 42 cm

(13 - 16")



Height 50 - 60 cm (20 - 24")

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



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



Evenly moist soil is best for rooting. Daminozide at 1500 to 2500 ppm week 4. Pinch at transplant.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	21 / 22 C	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	21 / 22 C	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 to 150 ppm				
Week 4	5.8 to 6.2	.80 to .90	20 to 21 C	Feed 100 to 150 ppm		Daminozide as needed		
Week 5	5.8 to 6.2	.80 to .90	18 to 20 C	Feed 100 to 150 ppm		Daminozide as needed		Pinch recommended





# CLIO<sup>TM</sup> Cleome hybrida



#### **FINISHING TIPS**

Maintain soil evenly moist High light levels best for finishing

Average Time (from liners)	i lemperature l		Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day		400 450 N		
12 cm (Quart)	(18°C)	Pinch – Suggested day	100 - 150 ppm N	Daminozide spray	
8 to 10 wks		of transplant	Soil EC 0.8 - 1.0	application @ 2000 – 3750 ppm	
15 cm (1 gallon)			pH 5.8 to 6.2		

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



<u>PGR</u> - Spray Daminozide at 2000 to 3750 ppm on finished plants early in crop schedule <u>Maintain good airflow</u> and allow plants to dry before nightfall. The foliage is susceptible to Oedema.

<u>Scout</u> for Aphids, Mites, Thrips and Whitefly <u>Drench</u> after transplant for Botrytis and Pythium / Phytophthora. Scout for Powdery Mildew

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	1.0 to 1.2	18° to 20°C	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	Control of Pythium & Phytophthora
Week 6 to 14	5.8 to 6.2	1.2 to 1.5	16° to 18°C	feed 150 to 200 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size		





# GOLF<sup>TM</sup>

Craspedia sp.







**GOLF™** Beauty Improved

- Improved vigor and rooting make this plant a good fit for programs in any market
- Unique bright yellow, ball shaped blooms grab attention at retail
- Works well as an upright element in a combination
- Mature height and width is 16" x 10" (41cm X 25cm)





# GOLF<sup>TM</sup> Craspedia sp.



### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories Don't store (cuttings and plugs in cold store)







Flowering time

Width

Height

Spring / Summer Flowering

(10 - 12") 25 - 30 cm (14 - 18") 36 - 36 cm

Average Time	e Time Temperature Ho		Fertilization	Fungicide
5 / 6 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	Suggested	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 – 5/6 66° - 68° (19° - 20° C)		Weeks 3-5 100 to 150 ppm N	Spray fungicide to control Botrytis and bacteria Week 2



Irrigation specification - Remove from mist as soon as possible (day 2 or 3).



Dip cut ends of cuttings in rooting hormone prior to sticking or Spray application of K-IBA-This will enable more uniform rooting.

Daminozide at 1200 to 1500 ppm day of sticking. Pinch plants when they begin to elongate to create branching at base of plant.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.4	0.80	72 / 74 F	50 ppm N in mist	Optional		Day of sticking	Additional lighting will hasten flowering
Week 2	5.8 to 6.4	.80 to .90	72 / 74 F	50 ppm N in mist	Optional		Second fungicide app	Fungicide to control Botrytis!
Week 3	5.8 to 6.4	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed		
Week 4	5.8 to 6.4	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed		
Week 5	5.8 to 6.4	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm	Optional	Daminozide as needed		





# GOLF<sup>TM</sup> Craspedia sp.



### **FINISHING TIPS**

Pinch week 3 in liner or at transplant
Plant liners below new soil to support plants at maturity

Average Time (from liners)	Temperature		Fertilization	Plant Growth Regulator
8 to 9 wks	Average Day	Pinch –Yes	100, 150 mm N	
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	Additional	100 - 150 ppm N	In liner and
8 to 10 wks		lighting not	Soil EC 1.0 - 1.2	finish stages
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	required	pH 5.8 to 6.4	

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



<u>PGR</u> - Spray Daminozide at 2000 to 2500 ppm for finishing plants Paclobutrazol drench application at 1 to 2 ppm for finishing if required <u>Drench</u> broad spectrum fungicide after transplant <u>Scout</u> for Aphids on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		B-9 as needed	Spray fungicide after transplant	
Week 6 to	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutraz ol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench if required

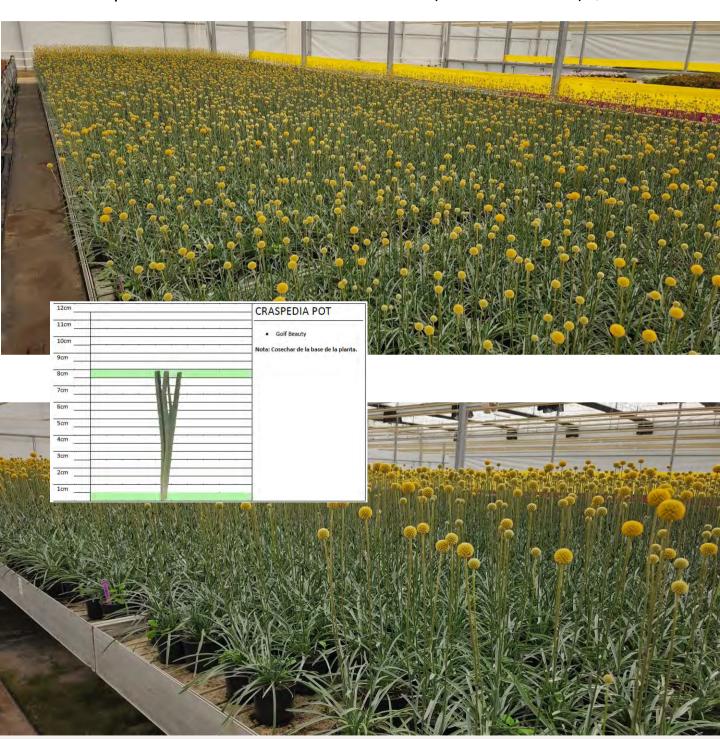




# GOLF<sup>TM</sup> Craspedia sp.



Craspedia GOLF™ - Photos from commercial production at Europe, 2022





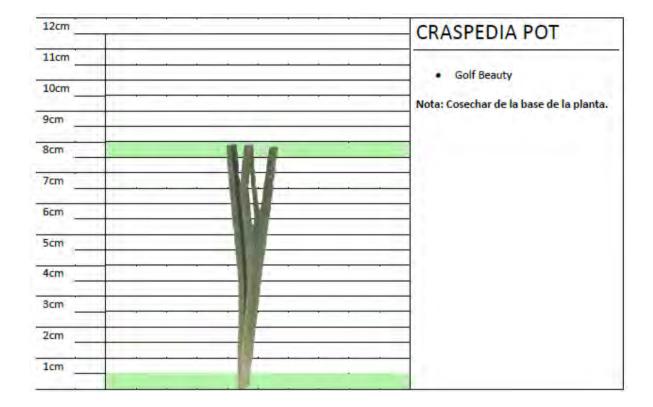




# GOLF<sup>TM</sup> Craspedia sp.



### Craspedia GOLF™ - Photos from commercial production at Europe, 2022





## **CUBANO™**

Cuphea









Blooms in the spring and throughout the summer Cuphea flowering is hastened by long days and warm temperatures
Thrives in the heat
Good garden performance
Attracts pollinators

Cuphea hybrida

More varieties in the CUBANO™ series:



**CUBANO™ Cristo** Cuphea hybrida



**CUBANO™ Fuente** Cuphea ignea

EU & ROW







### **CUBANO™**

Cuphea



### **PROPAGATION TIPS**

Stick on priority – Number 4 out of 4 categories







Flowering time

Spring / Summer

Width

Height

**Flowering** 

(12 - 16") 30 - 41 cm

(10 - 12") 25 - 30 cm

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 - 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



Apply broad spectrum fungicide the day of sticking to control leaf disease. Proper air movement is required to control disease issues during propagation. Allow some drying of soil between irrigations in weeks 3 and 4.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.6 to 6.1	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.1	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.6 to 6.1	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		





### **CUBANO™**

Cuphea



### **FINISHING TIPS**

Pinch is required, possibly two pinches for larger containers Cuphea flowering is hastened with warm temperatures and long days

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 8 wks	Average Day	Pinch –	450 - 200 ann N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Recommende d	150 - 200 ppm N	Daminozide at 2500 to	
7 to 9 wks		Long days	Soil EC 1.0 - 1.2	3750 ppm on more vigorous varieties	
(15 cm) 6 ½"	1 ppp	hastens flowering	pH 5.6 to 6.1		
7 to 10 wks				Paclobutrazol 1 to 2 ppm drench to finish high quality plants	
(20 cm) 8"	3 ррр				

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



<u>PGR</u> - Spray Daminozide at 1500 to 2500 ppm on young finished plants - Paclobutrazol drench application at 1 ppm for finishing if required for the more vigorous varieties <u>Maintain good airflow</u> and allow plants to dry before nightfall <u>Not</u> susceptible to Oedema

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.6 to 6.1	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Not required	Daminozide as needed 1500 to 2500 ppm	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.1	1.0 to 1.2	65 to 68 f	feed 100 to 200 ppm	Not required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench to finish high quality plants





## DARLIN'™

Dahlia variabili









- Large double blooms are available in both solids and bi-colors
- · Works well 6" (15 cm) programs
- Blooms spring to summer
- Mature size is 10-12 inches height x 10-12 inches width
   (25-30 cm height x 25-30 cm width)

More varieties in the DARLIN'™ series:











## DARLIN'TM

Dahlia variabili



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering (12 - 16") 30 - 41 cm (10 - 12") 25 - 30 cm

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 - 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



Apply broad spectrum fungicide the day of sticking to control leaf disease including control of Powdery Mildew

Proper air movement is required to control disease issues during propagation
Night interruption 10pm to 2am or daylength extension started day of sticking at least
10 foot candles

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 65 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed at 1500 ppm		
Week 4	5.8 to 6.2	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm				





## DARLIN'™

Dahlia variabili



### **FINISHING TIPS**

Pinch is required, possibly two pinches for larger containers

Start 14 hour days after transplant – extended day or night interruption

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 8 wks	Average Day	Pinch –	150, 200 man N	Daminozide at 1500
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Optional  Long days required for	150 - 200 ppm N	Paclobutrazol 1 ppm
7 to 9 wks			Soil EC 1.0 - 1.2	drench at finish for vigorous varieties
(15 cm) 6 ½"	1 ррр	uniform flowering	pH 5.6 to 6.1	
8 to 10 wks				
(18 cm) 7"	1 ррр			

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



<u>PGR</u> - Spray Daminozide at 1500 ppm on young finished plants - Paclobutrazol drench application at 1 ppm at finishing if required for the more vigorous varieties Spray to control Powdery Mildew after transplant

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.6 to 6.1	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Require d	Daminozide as needed 1500 ppm	Spray fungicide after transplant	
Week 6 to 13	5.6 to 6.1	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Require	Paclobutrazol Drench at 1 ppm	Include Powdery Mildew control	





### **TRINITY**<sup>TM</sup>

Diascia barberae





**TRINITY™** Grace

Large flowers and exceptional weather tolerance
Holds blooms longer for an improved shelf life
Grows into a small bush
Mature Height and Width
12 inches X 14 inches
(30cm x 36cm)



**TRINITY™ Sunset** 

### **TRINITY**<sup>TM</sup>

Diascia barberae



#### **PROPAGATION TIPS**

Stick on priority - Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(12 - 14") 30 - 36 cm (14 - 16") 36 - 41 cm

Average Time	Temperature	Temperature Hormone		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 68° - 70° (20° - 21° C)		Weeks 3-5 100 to 150 ppm N	Apply broad spectrum Week 2	



**Misting specification -** Remove from mist as soon as possible

- Spray adjuvant at sticking



- Maintain warm temperatures allowing plants to develop.
- Spray Daminozide at 1500 to 2000 ppm
- Pinch is recommended week 4 or at transplant

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	72 / 74 F	Feed 100 ppm to 150 ppm	Not required			
Week 4	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F	Feed 100 to 150 ppm	Not required	Daminozide as needed		Pinch
Week 5	5.8 to 6.2	0.9 to 1.0	68 F	Feed 100 to 150 ppm	Not required	Daminozide as needed		





### **TRINITY**<sup>TM</sup>

Diascia barberae



#### **FINISHING TIPS**

Pinch week 4 in liner or at transplant

Plant liners above new soil – not to bury plant meristem

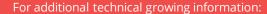
Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 9 wks	Average Day		100, 150 N	
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Pinch –Yes	100 - 150 ppm N	In liner and
8 to 10 wks		Day Neutral	Soil EC 1.0 - 1.2 pH 5.8 to 6.2	finish stages
(15 cm) 6 ½"	65° - 68° (18° - 20° C)			

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



<u>PGR</u> - Spray Daminozide at 2500 to 3750 ppm for finishing plants Paclobutrazol — Do no apply <u>Spray</u> broad spectrum fungicide after transplant <u>Scout</u> for Aphids and Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	0.9 to 1.2	65 to 68 f	feed 100 to 150 ppm		Daminozide as needed	Spray fungicide after transplant	
Week 6 to	5.8 to 6.2	0.9 to 1.2	65 to 68 f	feed 100 to 150 ppm				Do not apply Paclobutrazol







# **FELICITY**<sup>TM</sup>

Felicia amelloides



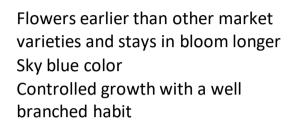






**FELICITY™** Leading Lady

ONLY





**FELICITY™** Blue





# **FELICITY**<sup>TM</sup>

Felicia amelloides



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Early Spring / Summer (10 - 12") **Flowering** 

25 - 30 cm

(10 - 14") 25 - 36 cm

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



Irrigation specification - Remove from mist as soon as possible



Apply broad spectrum fungicide the day of sticking to control leaf disease.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	72 / 74 F	50 ppm N in mist	No required		Day of sticking	
Week 2	5.6 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.2	.90 to 1.0	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		



## FELICITY™

Felicia amelloides



#### **FINISHING TIPS**

Soil should remain evenly moist and do not run soil too wet during cooler growing conditions. Root system and foliage will develop problems under continuous wet soil conditions

Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	No Pinch	100 200 mm N	
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Required	100 - 200 ppm N	Daminozide spray application at 2500 to 3750 ppm for finishing
7 to 8 wks		Not Required	Soil EC 0.9 - 1.1	
(15 cm) 6 ½"	1 ррр	Day Neutral	pH 5.6 to 6.2	
8 to 9 wks				
(20 cm) 8"	3 ррр			

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



<u>PGR</u> - Spray Daminozide at 2500 ppm on young finished plants - <u>Maintain good airflow</u> and allow plants to dry before nightfall <u>Scout</u> for Aphids, Thrips and Whitefly

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.6 to 6.2	0.9 to 1.1	65 to 68 f	feed 150 to 200 ppm	Not required	Daminozide as needed 2500 ppm	Drench fungicide after transplant	
Week 6 to	5.6 to 6.2	0.9 to 1.1	65 to 68 f	feed 150 to 200 ppm	Not required			





### **SOL SEEKER™**

**Helianthus hybrid** 







**SOL SEEKER™** Bee Yellow

### More varieties in the SOL SEKKER™ series:



SOL SEEKER™ Golden Nectar



SOL SEEKER™ Honey



### SOL SEEKER™

**Helianthus hybrid** 



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Height

Spring / Summer **Flowering** 

(24 - 36")

(28 - 36") 61 - 91 cm 71 - 91 cm

Average Time	Temperature	Temperature Hormone Fer		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 - 5 68°-70 (20° - 21° C)		Weeks 3-5 100 to 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist heading into evening conditions to reduce disease pressures.

Spray broad spectrum fungicide application day after sticking and at week 3 (include for control of Powdery Mildew)



Application of K-IBA can hasten rooting. Daminozide at 1200 ppm week 4 or just before transplant

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist				
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm			Second fungicide app	
Week 4	5.8 to 6.2	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		Pinch at transplant



### SOL SEEKER™

**Helianthus hybrid** 



#### **FINISHING TIPS**

Pinch at transplant or week after transplant

Keep night temperatures above 55° F (13° C). Lower temperatures will stall plant growth but flower development will continue.

Longer daylength and warm temperatures will hasten growth development

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 8 wks	Average Day		150, 200 man N	
(12 cm) 5" pot	65° (18° C)	Extended day lighting if day length is blow	150 - 200 ppm N	Daminozide at 2,000 to
8 to 9 wks	CE9 (4.09 C)		Soil EC 1.0 - 1.5	2,500 ppm spray applications
(15 cm) 6 ½"	65° (18° C)	12 hours	pH 5.7 to 6.3	
8 to 9 wks				
(20 cm) 8"	3 plants per container			

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



Spray for Powdery Mildew control

<u>Temperature is key</u> to maintain proper growth. Temperatures above 55 F (13 C) is required Scout for Aphids and Thrips on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.7 to 6.3	1.0 to 1.2	65 f	feed 100 to 150 ppm	See above	Daminozide as needed	Spray fungicide after transplant	
Week 6 to 13	5.7 to 6.3	1.0 to 1.5	65 f	feed 150 to 200 ppm		Paclobutrazol Drench at 1 ppm		Paclobutrazol 1 ppm drench when plants reach 85% of desired size



# MUSICA®

Impatiens walleriana







**MUSICA© Pink Aroma** 

- Spectacular double flowers in a wide range of colors
- Uniform compact growth habit across the series
- Naturally branched so no pinch necessary
- Great in 12 cm/quarts up to hanging baskets
- Mature height and width is 13" x 18" (33 cm x 46 cm)

#### More varieties in the MUSICA© series:



MUSICA© Lavender



MUSICA© Bicolor Red



MUSICA© Princess Pink



MUSICA© Pure White



MUSICA© Bicolor Pink



MUSICA© Electric Purple



MUSICA© Elegant Red







# MUSICA®



#### **PROPAGATION TIPS**

Stick on priority - Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer **Flowering** 

(15 - 20") 35 - 45 cm

(10 - 15") 25 - 35 cm

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 3-5 80 ppm N	Apply broad spectrum Week 2



- Spray adjuvant at sticking. Remove from mist as soon as possible



- Shade will be required for later spring/summer production Maintain warm temperatures allowing plants to develop
- Average daily temperature of 70 F
- Spray fungicide to control botrytis

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.80 to .90	Cool to 68 – 70 F	Feed 100 ppm N				
Week 4	5.8 to 6.2	.80 to .90	68 to 70 F	Feed 100 ppm N		Should not be required		





# MUSICA®

Impatiens walleriana



### **FINISHING TIPS**

Shade will be required for later spring/summer production Maintain a low EC level for proper growth and sizing of plant Transplant liners when plants are rooted and actively growing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day		100 - 125 ppm N	Paclobutrazol at 0.5 ppm drench within 3	
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Pinch –No	100 - 123 μμπτι	weeks of finishing.	
8 to 9 wks		Daylength Neutral	Soil EC 0.8 - 1.0	Allowing soil to dry between irrigations and	
(15 cm) 6 ½"	68° - 70° (20° - 21° C)		pH 5.8 to 6.2	modest fertility will keep plants more compact	

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



<u>Spray</u> broad spectrum fungicide after transplant <u>Scout</u> and spray for Powdery Mildew <u>Scout</u> for Aphids Leafminers and Thrips on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	0.8 to 1.0	65 to 68 f	feed 100 to 125 ppm N	Day neutral	Paclobutrazol at 0.5 ppm drench within 3 weeks of finishing	Drench fungicide at transplant	
Week 6 to 13	5.8 to 6.2	0.8 to 1.0	65 to 68 f	feed 100 to 125 ppm N				







### SOL LUNA™

Impatiens hybrid





**SOL LUNA™ Electric Pink** 

- Takes sun and shade equally well
- Consumer can plant anywhere for a tidy ball of bright color
- Compact well matched series, easy to grow and reliable in production
- Perfectly suited for premium pack and quart programs, will fill a 6" (15cm) pot beautifully
- Mature height and width is 12 inches x 18 inches (30c m x 46 cm)

More varieties in the SOL LUNA™ series:











## SOL LUNA™

Impatiens hybrid



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(12 - 14") 30 - 36 cm (12 - 18") 30 - 46 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 80 ppm N	Apply broad spectrum Week 2



- Spray adjuvant at sticking



- Spray Ethephon at 300 ppm the day after stick. This will reset flowering response. One hour of Ethephon on the leaves will be sufficient time while mist if off.
- Maintain warm temperatures allowing plants to develop and flower
- Average daily temperature of 70 F

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	6.0 / 6.5	0.50	72 / 74 F		Not required		Day of sticking	
Week 2	6.0 / 6.5	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	6.0 / 6.5	.80 to .90	72 / 74 F	80 ppm N in mist	Not required			
Week 4	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			
Week 5	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			Pinch is not recommended





## SOL LUNA™

Impatiens hybrid



#### **FINISHING TIPS**

Maintain a low EC level for proper growth and sizing of plant Transplant liners when plants are rooted and actively growing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8 wks	Average Day		100 125 ppm N	If required, Uniconazole at 5 to 7
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Pinch –No	100 - 125 ppm N	ppm spray application
8 to 9 wks		Daylength Neutral	Soil EC 0.8 - 1.0	early in crop- Paclobutrazol at 0.5
(15 cm) 6 ½"	68° - 70° (20° - 21° C)	Neutrai	pH 6.0 to 6.5	ppm drench within 3 weeks of finishing

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



<u>PGR</u> - Spray Uniconazole 5 to 7 ppm early in crop
Paclobutrazol drench application at 0.5 ppm for finishing
<u>Spray</u> broad spectrum fungicide after transplant
<u>Scout</u> for Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Uniconazole spray	Drench fungicide at transplant	
Week 6 to 13	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutrazol Drench at 0.5 ppm		Allow plants to reach 85% of required size before PGR application





### SOL LUNA PRIME™

**New Guinea Impatiens** 







SOL LUNA PRIME™ Peach

- · Takes sun and shade equally well
- Consumer can plant anywhere for a tidy ball of bright color
- Compact well matched series, easy to grow and reliable in production
- Perfectly suited for premium pack and quart programs, will fill a 6" (15cm) pot beautifully
- Mature height and width is 12 inches x 18 inches (30c m x 46 cm)

More varieties in the SOL LUNA PRIME™ series:



SOL LUNA PRIME™ White Blush



SOL LUNA PRIME™ Violet



SOL LUNA PRIME™ Light Salmon







### SOL LUNA PRIME™

**New Guinea Impatiens** 



### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(12 - 14") 30 - 36 cm (12 - 18") 30 - 46 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 80 ppm N	Apply broad spectrum Week 2



- Spray adjuvant at sticking



- Spray Ethephon at 300 ppm the day after stick. This will reset flowering response. One hour of Ethephon on the leaves will be sufficient time while mist if off.
- Maintain warm temperatures allowing plants to develop and flower
- Average daily temperature of 70 F

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	6.0 / 6.5	0.50	72 / 74 F		Not required		Day of sticking	
Week 2	6.0 / 6.5	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	6.0 / 6.5	.80 to .90	72 / 74 F	80 ppm N in mist	Not required			
Week 4	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			
Week 5	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			Pinch is not recommended





### SOL LUNA PRIME™

**New Guinea Impatiens** 



#### **FINISHING TIPS**

Maintain a low EC level for proper growth and sizing of plant Transplant liners when plants are rooted and actively growing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8 wks	Average Day		100 125 ppm N	If required, Uniconazole at 5 to 7
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Pinch –No	100 - 125 ppm N	ppm spray application
8 to 9 wks		Daylength Neutral	Soil EC 0.8 - 1.0	early in crop- Paclobutrazol at 0.5
(15 cm) 6 ½"	68° - 70° (20° - 21° C)	Neattai	pH 6.0 to 6.5	ppm drench within 3 weeks of finishing

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



<u>PGR</u> - Spray Uniconazole 5 to 7 ppm early in crop
Paclobutrazol drench application at 0.5 ppm for finishing
<u>Spray</u> broad spectrum fungicide after transplant
<u>Scout</u> for Thrip on regular basis

Fir	nishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
	Veek 5 ansplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Uniconazole spray	Drench fungicide at transplant	
We	eek 6 to 13	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutrazol Drench at 0.5 ppm		Allow plants to reach 85% of required size before PGR application





### SUN HARMONY™

Impatiens hybrida





**SUN HARMONY™ Blushing Orchid** 

- Known for its large flowers and uniform growth, SUN HARMONY™ can be grown in the shade as well as in direct sun
- All varieties in the series are in perfect sync to assure the best retail display
- · Medium to large habit
- Mature height and width is
   16 inches x 14 inches (41 cm x 36 cm)

### More varieties in the SUN HARMONY® series:



SUN HARMONY™ Deep Orange



SUN HARMONY™ Deep Pink



SUN HARMONY™ White



SUN HARMONY™ Red



SUN HARMONY™ Scarlet



SUN HARMONY™ Violet







### SUN HARMONY™

Impatiens hybrida



### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(12 - 14") 30 - 36 cm (14 - 16") 36 - 41 cm

Average Time	erage Time Temperature		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 68° - 70° (20° - 21° C)		Weeks 3-5 80 ppm N	Apply broad spectrum Week 2



- Spray adjuvant at sticking



- Spray Ethephon at 300 ppm the day after stick. This will reset flowering response. One hour of Ethephon on the leaves will be sufficient time while mist if off.
- Maintain warm temperatures allowing plants to develop and flower
- Average daily temperature of 70 F

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	6.0 / 6.5	0.50	72 / 74 F		Not required		Day of sticking	
Week 2	6.0 / 6.5	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	6.0 / 6.5	.80 to .90	72 / 74 F	80 ppm N in mist	Not required			
Week 4	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			
Week 5	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			Pinch is not recommended







### SUN HARMONY™

Impatiens hybrida



### **FINISHING TIPS**

Maintain a low EC level for proper growth and sizing of plant Transplant liners when plants are rooted and actively growing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8 wks	Average Day		100 135 mm N	If required, Uniconazole at 5 to 7
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Pinch –No	100 - 125 ppm N	ppm spray application
8 to 9 wks		Daylength Neutral	Soil EC 0.8 - 1.0	early in crop- Paclobutrazol at 0.5
(15 cm) 6 ½"	68° - 70° (20° - 21° C)	ivedital	pH 6.0 to 6.5	ppm drench within 3 weeks of finishing

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



PGR - Spray Uniconazole 5 to 7 ppm early in crop
 Paclobutrazol drench application at 0.5 ppm for finishing
 Spray broad spectrum fungicide after transplant
 Scout for Thrip on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Uniconazole spray	Drench fungicide at transplant	
Week 6 to 13	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutrazol Drench at 0.5 ppm		Allow plants to reach 85% of required size before PGR application







## **STARDOM™**

Jamesbrittenia





STARDOM™ White Fusion

- Enhanced resistance to foliage disease
- Day neutral / benefits from long days
- Heat tolerant and continues flowering through the summer
- Perfect for combinations
- Mature height and width 8" x 12" (20cm x 30cm)

More varieties in the STARDOM™ series:



STARDOM™ Pink



STARDOM™ Purple



STARDOM™ Goldstar





### **STARDOM™**

Jamesbrittenia



### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

Width (6 - 8") Height

Spring / Summer **Flowering** 

15 - 20 cm

(10 - 14") 25 - 36 cm

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



Irrigation specification - Remove from mist as soon as possible. Mist enough to maintain turgid cuttings – keep on dry side.



Apply broad spectrum fungicide the day of sticking to control leaf disease. Stardom may require Daminaozide in propagation @ 1500 -2000 ppm if grown warm and under low light.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.5	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.8 to 6.5	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.5	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm				
Week 4	5.8 to 6.5	.90 to 1.0	65 to 68 F	Feed 100 ppm		Daminozide as needed		







### **STARDOM™**

Jamesbrittenia



### **FINISHING TIPS**

Maintain consistent soil moisture –plants should not dry to severe wilt Cool temperature finishing for best quality and optimum flower color

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	Pinch –	100 200 nnm N	Daminozide at 1500 to 2500 ppm on more
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Recommende d	100 - 200 ppm N	vigorous varieties
7 to 8 wks		Not Required	Soil EC 0.8 - 1.0	Paclobutrazol Drench
(15 cm) 6 ½"	1 ррр	– Day Neutral	pH 5.8 to 6.5	at 1 - 2 ppm to finish
7 to 8 wks				
(20 cm) 8"	3 ррр			

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



<u>PGR</u> - Spray Daminozide at 1500 to 2500 ppm on young finished plants - Paclobutrazol drench application at 1 to 2 ppm for finishing if required for the more vigorous varieties <u>Maintain good airflow</u> and allow plants to dry before nightfall Scout for Aphids & Thrips on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.5	0.8 to 1.0	65 to 68 f	feed 100 to 150 ppm	Not require d	Daminozide as needed 1500 to 2500 ppm	Spray fungicide after transplant	
Week 6 to 12	5.8 to 6.5	0.8 to 1.0	65 to 68 f	feed 100 to 200 ppm	Not require d	Paclobutrazol Drench at 1 - 2 ppm		Paclobutrazol 1 – 2 ppm drench when plants reach 85% of desired size





## **GEM™** Compact

Lantana camara





GEM™ Compact Yellow Topaz

- Gem<sup>™</sup> Compact are ideal for southern regions with a naturally more compact plant habit
- Makes a bright ball of color that does not cycle out of bloom
- Perfect for heat tolerant/drought tolerant programs
- Mature height and width is 8 inches x 10 inches (20cm x 25cm)

### More varieties in the GEM™ series:



GEM™ Compact Orange Fire



GEM™ Compact Pink Opal



GEM™ Compact Rose Quartz



**GEM™** Compact White Sapphire





## **GEM™** Compact

Lantana camara



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(8 - 10") 20 - 25 cm (8 - 14") 20 - 36 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 100 to 150 ppm N	Apply broad spectrum Week 2



Misting specification - Remove from mist as soon as possible

- Spray adjuvant at sticking



- Maintain warm temperatures allowing plants to develop.
- Spray Daminozide at 2000 to 2500 ppm
- Pinch is recommended week 4 or at transplant

Rooting	рН	EC	Temp	Feed	Feed Light		Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	72 / 74 F	Feed 100 ppm to 150 ppm	Not required			
Week 4	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm	Not required			
Week 5	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm	Not required			







## **GEM™** Compact

Lantana camara



#### **FINISHING TIPS**

Keep the temperatures moderately warm to allow plants to continue to develop (average daily temperature at 73 to 75 F (23 to 24 C)

Gem Compact may be too compact for cooler growing regions

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	Pinch –Yes	450, 200 N		
(12 cm) 5" pot	73° - 75° (23° - 24° C)	Night	150 - 200 ppm N	During	
8 to 9 wks	700 750 (220 240 6)	interruption or extended	Soil EC 1.0 - 1.2	finishing stage	
(15 cm) 6 ½"	73° - 75° (23° - 24° C)	day- Optional	pH 5.8 to 6.2		

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



<u>PGR</u> - Spray Daminozide at 2000 to 3500 ppm for finishing plants Paclobutrazol drench application at 1 ppm for finishing if required <u>Spray</u> broad spectrum fungicide after transplant <u>Scout</u> for Leafminors, Thrips and Whiteflies on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		B-9 as needed	Spray fungicide after transplant	
Week 6 to 13	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 ppm drench if required





## **GEM**<sup>TM</sup>

Lantana camara





- Makes a bright ball of color that does not cycle out of bloom
- Perfect for heat tolerant/drought tolerant programs
- Mature height and width is 10 inches x 12 inches (25cm x 30cm)

**GEM™ Lemon Quartz** 

More varieties in the GEM™ series:











## **GEM**<sup>TM</sup>

Lantana



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

ne Width

Height

Spring / Summer Flowering

(10 - 14") 25 - 36 cm (8 - 14") 20 - 36 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 100 to 150 ppm N	Apply broad spectrum Week 2



Misting specification - Remove from mist as soon as possible

- Spray adjuvant at sticking



- Maintain warm temperatures allowing plants to develop.
- Spray Daminozide at 2000 to 2500 ppm
- Pinch is recommended week 4 or at transplant

Rooting	рН	EC	Temp	Feed	Feed Light		Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	72 / 74 F	Feed 100 ppm to 150 ppm	Not required			
Week 4	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm	Not required			
Week 5	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm	Not required	Daminozide as needed		





## **GEM<sup>TM</sup>**

Lantana



#### **FINISHING TIPS**

Keep the temperatures moderately warm to allow plants to continue to develop (average daily temperature at 73 to 75 F (23 to 24 C)

Gem Compact may be too compact for cooler growing regions

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator		
6 to 7 wks	Average Day	Pinch –Yes	450 200 N			
(12 cm) 5" pot	73° - 75° (23° - 24° C)	Night	150 - 200 ppm N	In liner and		
8 to 9 wks	729 759 /229 249 6\	interruption or extended	Soil EC 1.0 - 1.2	finish stages		
(15 cm) 6 ½"	73° - 75° (23° - 24° C)	day- Optional	pH 5.8 to 6.2			

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



<u>PGR</u> - Spray Daminozide at 2500 to 3750 ppm for finishing plants Paclobutrazol drench application at 1 to 2 ppm for finishing if required <u>Spray</u> broad spectrum fungicide after transplant <u>Scout</u> for Leafminors, Thrips and Whiteflies on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		B-9 as needed	Spray fungicide after transplant	
Week 6 to 13	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench if required





## **LAVEANNA**<sup>TM</sup>

Lavendula stoechas







**LAVEANNA™ Violet** 

- One of the earliest flowering Spanish lavender on the market
- Blooms in the spring with extended flowering into the heat of summer
- Good branching without pinch
- Improved flowering in both size and flag
- · More consistent flowering

### More varieties in the LAVEANNA™ collection:



LAVEANNA™ White Frost



LAVEANNA™ Grand Purple





## **LAVEANNA**<sup>TM</sup>

Lavendula stoechas



#### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

Width

Height

Spring / Summer (10-14") Flowering

(12 - 16") 25 - 36 cm 30 - 41 cm

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 68° - 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.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	Feeding through Mist
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 – 70 F	Feed 100 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	66 to 68 F	Feed 100 ppm				
Week 5	5.8 to 6.2	1.0 to 1.2	66 to 68 F	Feed 100 ppm		Daminozide as needed		





## **LAVEANNA**<sup>TM</sup>

Lavendula stoechas



### **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		100 150 ppm N	
(12 cm) 5" pot	62° - 68° (17° - 20° C)	Pinch optional	100 - 150 ppm N	In liner and finish stages
8 to 9 wks		No lighting necessary	Soil EC 1.0 - 1.2	
(15 cm) 6 ½"		riceessary	pH 5.8 to 6.2	
8 to 9 wks				
(20 cm) 8"	3 plants per container			

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



<u>Consistent soil moisture levels are best</u> – allow soil to dry slightly between irrigations Scout for Aphids and Spider Mites

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	
Week 8 to	5.8 to 6.2	1.0 to 1.2	62 to 68 f	feed 100 to 150 ppm	Not Required			Paclobutrazol @ 2 ppm drench when buds showing if growing in warm conditions





## **GLOW**<sup>TM</sup>

Lobelia erinus









**GLOW™** Blue Volt

Selected to hold its speckled pattern into the heat

Mounded habit works well in baskets and combos

Blooms early enough for any market Mature Height and Width 18 inches X 24 inches (46cm x 61cm)

### More varieties in the GLOW™ series:



GLOW™ Electric Blue



GLOW™ White Lightning





## **GLOW**<sup>TM</sup>

Lobelia erinus



#### **PROPAGATION TIPS**

Stick on priority - Number 2 out of 4 categories







Flowering time

g time V

Width Height

Spring / Summer Flowering (18 - 24") 46 - 61 cm (18 - 24") 46 - 61 cm

Average Time	Temperature	Temperature Hormone		Fungicide	
5 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2	



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not needed for a quality finish. Daminozide at 1500 to 2000 ppm Week 4 or 5 if needed.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is optional dependin g on region		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	72 / 74 F	Feed 100 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 ppm				
Week 5	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm				





# **GLOW**<sup>TM</sup>

Lobelia erinus



#### **FINISHING TIPS**

Facultative long day plant so extended day lighting is optional Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	No pinch	150 200 nnm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	necessary - Additional lighting	150 - 200 ppm N	In liner and	
8 to 9 wks		is optional	Soil EC 1.2 - 1.5	finish stages. Daminozide @ 2500 ppm	
(15 cm) 6 ½"		depending on region	pH 5.8 to 6.2		
8 to 10 wks					
(20 cm) 8"	3 plants per container				
8 to 10 wks					
(25 cm) 10"	3 plants per container				

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity

Maintain soil evenly moist – do not allow plants to dry completely

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Daminozide at 2,000 to 2,500 ppm	Spray fungicide after transplant	
Week 6 to 15	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 150 to 200 ppm		Paclobutrazol Drench at 1 ppm		Paclobutrazol 1 ppm drench when plants reach 85% of desired size

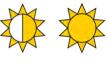




# **STREAM™**

Lobularia







**Champagne STREAM™** 

- Good heat tolerance and resistance to cold
- Flowers from early spring until frost
- · Makes an excellent landscape plant
- Great for attracting pollinators

More varieties in the STREAM™ series:



**Deep Lavender STREAM™** 



**Lilac STREAM™** 



Lavender STREAM™



Purple Imp. STREAM™



Raspberry STREAM™



Silver STREAM™



White STREAM™







## **STREAM™**

Lobularia



#### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(4 -6") 10 - 15 cm

(10 - 18") 24 - 46 cm

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 150 ppm N	Day of sticking & Week 2	



 $\textbf{Irrigation specification -} \ Remove \ from \ mist \ as \ soon \ as \ possible$ 



Application of K-IBA can hasten rooting. Daminozide at 1500 to 2500 ppm day of sticking. Lighting in propagation is not necessary. The Lobularia Stream™ Series is well branched and a pinch would only be necessary if grown under lower light levels.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.2 / 5.8	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	Feeding through Mist
Week 2	5.2 to 5.8	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.2 to 5.8	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 5	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		





### **STREAM™**

Lobularia



#### **FINISHING TIPS**

Pinch is optional

Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	Pinch /	100 150 ppm N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Optional	100 - 150 ppm N	In liner and	
8 to 9 wks		No lighting	Soil EC 0.8 - 1.0	finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	necessary	pH 5.6 to 6.0		
8 to 9 wks					
(20 cm) 8"	3 plants per container				
8 to 9 wks					
(25 cm) 10"	3 plants per container				

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



<u>Consistent soil moisture levels are best</u> – allow soil to dry slightly between irrigations Scout for Aphids on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	0.8 to 1.0	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.0	0.8 to 1.0	65 to 68 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

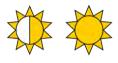




# STREAM™ Compact Lobularia







Good heat tolerance and resistance to cold

- Flowers from early spring until frost
- Makes an excellent landscape plant
- Great for attracting pollinators

**STREAM™ Compact White** 

More varieties in the STREAM™ Compact series:



**STREAM™ Compact Rose** 



STREAM™ Compact Purple



STREAM™ Compact Violet





# STREAM<sup>TM</sup> Compact Lobularia



#### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(4 -6") 10 - 15 cm

(10 - 18") 24 - 46 cm

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 150 ppm N	Day of sticking & Week 2



 $\textbf{Irrigation specification -} \ \mathsf{Remove} \ \mathsf{from} \ \mathsf{mist} \ \mathsf{as} \ \mathsf{soon} \ \mathsf{as} \ \mathsf{possible}$ 



Application of K-IBA can hasten rooting. Daminozide at 1500 to 2500 ppm day of sticking. Lighting in propagation is not necessary. The Lobularia Stream™ Series is well branched and a pinch would only be necessary if grown under lower light levels.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.2 / 5.8	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	Feeding through Mist
Week 2	5.2 to 5.8	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.2 to 5.8	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 4	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 5	5.2 to 5.8	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		





# STREAM™ Compact

Lobularia



#### **FINISHING TIPS**

Pinch is optional

Cool temperature finishing for best quality

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	Pinch /	100 150 ppm N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Optional	100 - 150 ppm N	In liner and	
8 to 9 wks		No lighting	Soil EC 0.8 - 1.0	finish stages	
(15 cm) 6 ½"	65° - 68° (18° - 20° C)	necessary	pH 5.6 to 6.0		
8 to 9 wks					
(20 cm) 8"	3 plants per container				
8 to 9 wks					
(25 cm) 10"	3 plants per container				

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



<u>Consistent soil moisture levels are best</u> – allow soil to dry slightly between irrigations Scout for Aphids on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.6 to 6.0	0.8 to 1.0	65 to 68 f	feed 100 to 150 ppm	Day Neutral	Daminozide as needed	Spray fungicide after transplant	
Week 6 to 12	5.6 to 6.0	0.8 to 1.0	65 to 68 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





## MAI TAI™

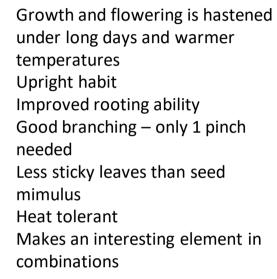
Mimulus aurantiacus













**MAI TAI™ Orange** 





### MAI TAI™

Mimulus aurantiacus



#### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

Width

Height

Spring / Summer **Flowering** 

(14 -20") 36 - 51 cm

(14 - 20") 36 - 51 cm

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



Irrigation specification - Remove from mist as soon as possible. Limit misting in propagation. Do not saturate soil



Application of K-IBA can hasten rooting. Maintain warm temperatures in propagation. Pinch Mimulus leaving 4 to 5 nodes below pinch

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 / 5.8	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	Feeding through Mist
Week 2	5.5 to 5.8	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.5 to 5.8	.90 to 1.0	Cool to 68 – 70 F	Feed 100 ppm				
Week 4	5.5 to 5.8	1.0 to 1.2	68 to 70 F	Feed 100 ppm				Pinch
Week 5	5.5 to 5.8	1.0 to 1.2	68 to 70 F	Feed 100 ppm				





## MAI TAI™

Mimulus aurantiacus



#### **FINISHING TIPS**

Pinch will be required

Mimulus prefers long days and warm temperatures to flower

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	Pinch week 4	100, 150 non N		
(12 cm) 5" pot	65° - 68° (18° - 20° C)	or at transplant	100 - 150 ppm N	In liner and finish stages	
8 to 9 wks		No lighting	Soil EC 1.0 - 1.2		
(15 cm) 6 ½"		necessary	pH 5.5 to 5.8		
8 to 9 wks					
(20 cm) 8"	3 plants per container				
8 to 9 wks		8 to 9 wks			
(25 cm) 10"	3 plants per container				

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



Scout for Aphids and Whiteflies

Botrytis and Rhizoctonia – fungicide drench after transplant to control root and stem diseases

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.5 to 5.8	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	Prefers long days	Daminozide as needed	Drench fungicide after transplant	
Week 6 to 13	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm				





### **NESIA**<sup>TM</sup>

Nemesia hybrida





\*\*\*

Blooms early with heavy flower coverage

More heat tolerant than other nemesia on the market

#### Season extender

Mature height and width is 8 inches x 10 inches (20cm x 25cm)

**NESIA™** Inca

More varieties in the NESIA™ series:



ALCOAM





NESIA™ Banana Swirl

NESIA™ Burgundy

NESIA™ Denim











NESIA™ Magenta

NESIA™ Snow Angel

NESIA™ Sunshine

NESIA™ Tropical

NESIA™ Tutti Frutti







### NESIA™

Nemesia hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Early Spring / Summer (10 - 12") Flowering

25 - 30 cm

(10 - 14") 25 - 36 cm

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



Irrigation specification - Remove from mist as soon as possible



Apply broad spectrum fungicide the day of sticking to control leaf disease. For the more vigorous varieties, apply Daminozide spray at 2000 ppm week 3.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist		Daminozide as needed	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		





### **NESIA**<sup>TM</sup>

Nemesia hybrida



#### **FINISHING TIPS**

Soil should remain evenly moist and do not run soil too wet during cooler growing conditions. Root system and foliage will develop problems under continuous wet soil conditions

Cool temperature finishing for best quality and optimum flower color

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	Pinch –	100 200 nam N	
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Recommended	100 - 200 ppm N	Daminozide spray application at 2500 to 3750 ppm
8 to 9 wks		Not Required –	Soil EC 1.0 - 1.2	
(15 cm) 6 ½"	1 ррр	Day Neutral	pH 5.6 to 6.0	
8 to 9 wks				
(20 cm) 8"	3 ррр			Paclobutrazol drench application at 2 ppm

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



<u>PGR</u> - Spray Daminozide at 2500 ppm on young finished plants - Paclobutrazol drench application at 2 ppm for finishing if required for the more vigorous varieties <u>Maintain good airflow</u> and allow plants to dry before nightfall <u>Scout</u> for Aphids, Thrips, Mites and Whitefly

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 150 to 200 ppm	Not required	Daminozide as needed 2500 ppm	Drench fungicide after transplant	
Week 6 to 12	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 150 to 200 ppm	Not	Paclobutrazol Drench at 2 ppm		Paclobutrazol 2 ppm drench when plants reach 85% of desired size



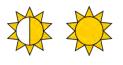


### **MENOR™**

Nemesia hybrida







Blooms early with heavy flower coverage

More heat tolerant than other nemesia on the market

Mature height and width is
8 inches x 10 inches (20cm x 25cm)

#### More varieties in the MENOR™ series:



MENOR™ Dual Bordeaux



MENOR™ Dual Purple



MENOR™ Dual Violet





### **MENOR™**

Nemesia hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Early Spring / Summer (10 - 12") Flowering

Width

Height

25 - 30 cm

(10 - 14") 25 - 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)		Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 65° - 68° (18° - 20° C)		Weeks 3-4 100 to 125 ppm N	Day of sticking & Week 2



Irrigation specification - Remove from mist as soon as possible



Apply broad spectrum fungicide the day of sticking to control leaf disease. For the more vigorous varieties, apply Daminozide spray at 2000 ppm week 3.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist		Daminozide as needed	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as needed		





### MENOR™

Nemesia hybrida



#### **FINISHING TIPS**

Soil should remain evenly moist and do not run soil too wet during cooler growing conditions. Root system and foliage will develop problems under continuous wet soil conditions Cool temperature finishing for best quality and optimum flower color

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	Pinch –	100 200 mmm N	
(12 cm) 5" pot	65° - 68° (18° - 20° C)	Recommended	100 - 200 ppm N	Daminozide spray application at 2500 to 3750 ppm
8 to 9 wks		Not Required –	Soil EC 1.0 - 1.2	
(15 cm) 6 ½"	1 ррр	Day Neutral	pH 5.6 to 6.0	
8 to 9 wks				
(20 cm) 8"	3 ррр			Paclobutrazol drench application at 2 ppm

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



<u>PGR</u> – Menor series is naturally compact, therefore PGR application is optional. If needed Daminozide application of up to 2500 ppm on young finished plants is possible. <u>Maintain good airflow</u> and allow plants to dry before nightfall <u>Scout</u> for Aphids, Thrips, Mites and Whitefly

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 150 to 200 ppm	Not required	Daminozide as needed 2500 ppm	Drench fungicide after transplant	
Week 6 to 12	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 150 to 200 ppm	Not required	Paclobutrazol Drench at 2 ppm		Paclobutrazol 2 ppm drench when plants reach 85% of desired size





### **HARMONY®**

New Guinea Impatiens





**HARMONY®** Bicolor Red

- Top selling NGI series in North America
- Easy to grow and very reliable in production
- Great in 12 cm/quarts up to hanging baskets
- Mature height and width is 16" x 12" (41cm x 30cm)

#### Our best-selling varieties in the HARMONY® series:



HARMONY® Violet



HARMONY®
Orange Blaze



HARMONY® Snow



HARMONY® Magenta



HARMONY® Red Cardinal



HARMONY® Dark Lilac



HARMONY® Candy Cream



HARMONY® Purple Cream



HARMONY® Tangerine







# HARMONY®

**New Guinea Impatiens** 



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(12 - 14") 30 - 36 cm (14 - 18") 36 - 46 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 80 ppm N	Apply broad spectrum Week 2



- Spray adjuvant at sticking



- Spray Ethephon at 300 ppm the day after stick. This will reset flowering response. One hour of Ethephon on the leaves will be sufficient time while mist if off.
- Maintain warm temperatures allowing plants to develop and flower
- Average daily temperature of 70 F

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	6.0 / 6.5	0.50	72 / 74 F		Not required		Day of sticking	
Week 2	6.0 / 6.5	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	6.0 / 6.5	.80 to .90	72 / 74 F	80 ppm N in mist	Not required			
Week 4	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			
Week 5	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			Pinch is not recommended







# HARMONY®

New Guinea Impatiens



#### **FINISHING TIPS**

Maintain a low EC level for proper growth and sizing of plant Transplant liners when plants are rooted and actively growing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8 wks	Average Day		100, 125 mm N	If required, Uniconazole at 5 to 7
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Pinch –No	100 - 125 ppm N	ppm spray application
8 to 9 wks		Daylength Neutral	Soil EC 0.8 - 1.0	early in crop- Paclobutrazol at 0.5
(15 cm) 6 ½"	68° - 70° (20° - 21° C)	ivedual	pH 6.0 to 6.5	ppm drench within 3 weeks of finishing

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



<u>PGR</u> - Spray Uniconazole 5 to 7 ppm early in crop
Paclobutrazol drench application at 0.5 ppm for finishing
<u>Spray</u> broad spectrum fungicide after transplant
<u>Scout</u> for Aphids and Thrips on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Uniconazole spray	Drench fungicide at transplant	
Week 6 to	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutrazol Drench at 0.5 ppm		Allow plants to reach 85% of required size before PGR application





#### HARMONY® COLORFALL™

**New Guinea Impatiens** 





HARMONY® COLORFALL™ Dark Leaf Red

- Breakthrough NEW trailing line of NGI
- Dependable Harmony® genetics, new plant habit
- Easy to grow and reliable in production
- Perfect for shade baskets, pots and combos
- Also works well in the landscape
- Mature height and width is
   12 inches x 16 inches (30 cm x 41 cm)

#### More varieties in the HARMONY® COLORFALL™ series:



HARMONY® COLORFALL™ Fuchsia



HARMONY® COLORFALL™



HARMONY® COLORFALL™



HARMONY® COLORFALL™

Light Coral



HARMONY® COLORFALL™ Neon Red



HARMONY® COLORFALL™ Pink



HARMONY® COLORFALL™ White







#### HARMONY® COLORFALL™

**New Guinea Impatiens** 



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(12 - 14") 30 - 36 cm (14 - 16") 36 - 41 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 80 ppm N	Apply broad spectrum Week 2



Spray adjuvant at sticking



- Spray Ethephon at 300 ppm the day after stick. This will reset flowering response. One hour of Ethephon on the leaves will be sufficient time while mist if off.
- Maintain warm temperatures allowing plants to develop and flower
- Average daily temperature of 70 F

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	6.0 / 6.5	0.50	72 / 74 F		Not required		Day of sticking	
Week 2	6.0 / 6.5	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	6.0 / 6.5	.80 to .90	72 / 74 F	80 ppm N in mist	Not required			
Week 4	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			
Week 5	6.0 / 6.5	.80 to .90	70 / 72 F	80 ppm N in mist	Not required			Pinch is not recommended





#### HARMONY® COLORFALL™

**New Guinea Impatiens** 



#### **FINISHING TIPS**

Maintain a low EC level for proper growth and sizing of plant Transplant liners when plants are rooted and actively growing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8 wks	Average Day		100, 125 mm N	If required, Uniconazole at 5 to 7
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Pinch –No	100 - 125 ppm N	ppm spray application
8 to 9 wks		Daylength Neutral	Soil EC 0.8 - 1.0	early in crop- Paclobutrazol at 0.5
(15 cm) 6 ½"	68° - 70° (20° - 21° C)	ivedual	pH 6.0 to 6.5	ppm drench within 3 weeks of finishing

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



<u>PGR</u> - Spray Uniconazole 5 to 7 ppm early in crop
Paclobutrazol drench application at 0.5 ppm for finishing
<u>Spray</u> broad spectrum fungicide after transplant
<u>Scout</u> for Aphids and Thrips on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Uniconazole spray	Drench fungicide at transplant	
Week 6 to 13	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Paclobutrazol Drench at 0.5 ppm		Allow plants to reach 85% of required size before PGR application





# OSTICA™

Osteospermum ecklonis







Ostica™ Glamour

- Early flowering time
- Controlled habit
- Can be grown in warm greenhouse with no cooling
- Mature height and width is 10 inches x 10 inches (25cm x 25cm)

Other top selling varieties in the OSTICA™ series:



Ostica™ Glamour



Ostica™ Amethyst



Ostica™ Bronze



Ostica™ Mega Pink



Ostica™ Midnight





### OSTICA™



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(10-12")

(8 - 10") 25 - 30 cm 20 - 25 cm

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° - 68° (18° - 20° C)		Weeks 3-5 100 to 150 ppm N	Spray fungicide to control Botrytis and bacteria Week 2



Irrigation specification – Spray adjuvant after sticking.



Application of IBA or K-IBA can hasten rooting. Daminozide at 2500 ppm day of sticking. Lighting in propagation will hasten flowering response - Night interruption or extended day. Pinch is not recommended.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	72 / 74 F	50 ppm N in mist		Daminozide day of sticking	Day of sticking	Feeding through Mist
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 5	5.8 to 6.2	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		







### OSTICA™

Osteospermum ecklonis



#### **FINISHING TIPS**

Pinch is not recommended

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 not	100 150 mm N		
(12 cm) 5" pot	60° - 68° (16° - 20° C)	recommende d	100 - 150 ppm N	In liner and	
8 to 9 wks		No lighting	Soil EC 1.0 - 1.2	finish stages	
(15 cm) 6 ½"	60° - 68° (16° - 20° C)	necessary	pH 5.8 to 6.2		
8 to 9 wks					
(20 cm) 8"	3 plants per container				
8 to 9 wks					
(25 cm) 10"	3 plants per container				

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



 $\underline{\text{Consistent soil moisture levels are best}} - \text{allow soil to dry slightly between irrigations} \\ \text{Scout for Aphids and Whiteflies}$ 

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Daminozide as needed	Spray fungicide after transplant	
Week 6 to 12	5.8 to 6.2	1.0 to 1.2	60 to 68 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





### **OSTICADE™**

Osteospermum ecklonis







OSTICADE™ Twilight Moon

- · Early flowering time
- Mounded/Semi Trailing habit is perfectly suited for hanging baskets and patio pots
- Can be grown in a warm greenhouse with no cooling
- Mature height and width is 8 inches x 12 inches (20cm x 30cm)

More varieties in the OSTICADE™ series:



**OSTICADE™** Aurora



OSTICADE™ Daybreak



OSTICADE™ Yellow



**OSTICADE™** Purple



**OSTICADE™** Pure White



**OSTICADE™** Pink







## **OSTICADE™**

Osteospermum ecklonis



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time Width

Height

Spring / Summer **Flowering** 

(12 - 14")

(8 - 10") 30 - 36 cm 20 - 25 cm

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° - 68° (18° - 20° C)		Weeks 3-5 100 to 150 ppm N	Spray fungicide to control Botrytis and bacteria Week 2



Irrigation specification – Spray adjuvant after sticking.



Application of IBA or K-IBA can hasten rooting. Daminozide at 2500 ppm day of sticking. Lighting in propagation will hasten flowering response - Night interruption or extended day. Pinch is not recommended.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	72 / 74 F	50 ppm N in mist		Daminozide day of sticking	Day of sticking	Feeding through Mist
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed		
Week 5	5.8 to 6.2	1.0 to 1.2	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed	Week 5	





## OSTICADE™

Osteospermum ecklonis



#### **FINISHING TIPS**

Pinch is not recommended

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 not	400, 450 as a N		
(12 cm) 5" pot	60° - 68° (16° - 20° C)	recommende d	100 - 150 ppm N	In liner and finish stages	
8 to 9 wks		No lighting	Soil EC 1.0 - 1.2		
(15 cm) 6 ½"	60° - 68° (16° - 20° C)	necessary	pH 5.8 to 6.2		
8 to 9 wks					
(20 cm) 8"	3 plants per container				
8 to 9 wks					
(25 cm) 10"	3 plants per container				

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



 $\frac{Consistent\ soil\ moisture\ levels\ are\ best}{Consistent\ soil\ to\ dry\ slightly\ between\ irrigations}$  Scout for Aphids and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm		Daminozide as needed	Spray fungicide after transplant	
Week 6 to 12	5.8 to 6.2	1.0 to 1.2	60 to 68 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





### PRIMAVERA™

Pericallis hybrida







Primavera™ Fuchsia

- · Early flowering time
- Suitable for small pots
- Compact with mounded habit
- Good heat tolerance in the Pericallis category
- Finished height and width is
   12 inches x 12 inches (30cm x 30cm)

Other top selling varieties in the PRIMAVERA™ series:



Primavera™ Fuchsia



Primavera™ Denim



Primavera™ Blueberry



Primavera™ Lavender



Primavera™ Navy Blue





### PRIMAVERA™

Pericallis hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer **Flowering** 

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

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° - 68° (18° - 20° C)		Weeks 3-5 100 ppm N	Spray fungicide to control Botrytis and bacteria Week 2



Irrigation specification – Spray adjuvant after sticking. Do not over-mist or saturate soil.



Drench plants with fungicide to protect against root and stem pathogens. Daminozide at 2500 ppm if required week 4 / 5. Pinch the week before transplant or at transplant. Provide adequate air-movement and allow plants to dry going into the evening.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	72 / 74 F	50 ppm N in mist		Daminozide day of sticking	Day of sticking	Feeding through Mist
Week 2	5.6 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.2	.90 to 1.0	Cool to 70 – 68 F	Feed 100 ppm				
Week 4	5.6 to 6.2	1.0 to 1.2	65 to 68 F	Feed 100 ppm		Daminozide as needed		
Week 5	5.6 to 6.2	1.0 to 1.2	65 to 68 F	Feed 100 ppm		Daminozide as needed		





### PRIMAVERA™

Pericallis hybrida



#### **FINISHING TIPS**

Spray fungicide to protect against Powdery Mildew – Supply adequate airflow Cool temperature finishing for best quality – 55 to 60 F average daily temperature

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
7 to 8 wks	Average Day	Pinch week	100 - 150 ppm N		
(12 cm) 5" pot	55° - 60° (13° - 16° C)	before transplant or		In liner and	
8 to 9 wks		at transplant	Soil EC 1.0 - 1.2	finish stages	
(15 cm) 6 ½"	1 plant per container	Day Neutral	pH 5.8 to 6.2		
8 to 9 wks					
(20 cm) 8"	3 plants per container				

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



Allow soil to dry between irrigations / For southern regions, some shade may be necessary Best to feed with Nitrate forms of Nitrogen

Daminozide at 2500 to 3750 ppm / Paclobutrazol at 1 to 2 ppm to finish crop Fuchsia, Navy Blue and Violet are the earliest to flower and most vigorous Scout for Aphids, Mites and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	1.0 to 1.2	55 to 60 f	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	
Week 6 to 12	5.8 to 6.2	1.0 to 1.2	55 to 60 f	feed 100 to 150 ppm	Not Required	Paclobutrazol Drench at 1 to 2 ppm	Control of water molds and Thielaviopsis	Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





### AMAZONAS™

Petunia









AMAZONAS™ Plum Cockatoo

Selected for unique color pattern Increased weather tolerance Mounded habit works well in baskets and combos

Blooms early enough for any market Mature Height and Width 16 inches X 20 inches (41cm x 51cm)





### AMAZONAS™

Petunia



#### **PROPAGATION TIPS**

Stick on priority - Number 2 out of 4 categories







Flowering time

g ume

Width Height

Spring / Summer Flowering

(18 - 20") 46 - 51 cm (16 - 18") 41 - 46 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 – Daminozide @ 2500 ppm / Uniconazole @ 10 ppm tank mix if plants are aggressively growing.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is optional depending on region	Daminozide day after sticking	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm				







## AMAZONAS™

Petunia



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	No pinch	150, 200 mm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	necessary	150 - 200 ppm N	Finish stars	
8 to 9 wks		Additional lighting	C-:  FC 12 1 F	Finish stage Daminozide @ 1500 to 2500 ppm /	
(15 cm) 6 ½"		is optional depending on region	Soil EC 1.2 - 1.5 pH 5.6 to 6.0		
8 to 10 wks					
(20 cm) 8"	3 plants per container				
8 to 10 wks					
(25 cm) 10"	3 plants per container				

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity PGR – Amazonas genetics are naturally more compact. Spray Daminozide at lower rates if needed.

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide spray applications	Spray fungicide after transplant	
Week 5 to 15	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutrazol Drench at 1 ppm if needed		







### **AMORE®**

Petunia hybrida





 Unique heart shaped pattern on every bloom

- Early flowering with a mounded habit
- Great in pots, baskets and combos
- A unique product with retail and end-consumer appeal
- Mature height and width is 12" x 12" (30cm x 30cm)

**AMORE®** King of Hearts Imp.

More varieties in the AMORE® series:



**AMORE® Princess** 



**AMORE®** Queen of Hearts



AMORE® Pink Hearts



**AMORE® Purple** 



AMORE® Heart & Soul



AMORE® Fluttering Heart



**AMORE®** Fiesta



AMORE® Joy

EU & ROW
ONLY







# **AMORE**®

Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority — Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering (14 - 18") 36 – 46 cm (12 - 14") 30 - 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 – Daminozide @ 2500 ppm / Uniconazole @ 10 ppm tank mix if plants are aggressively growing. Amore® Fiesta, Heart & Soul and Queen of Heart are most vigorous varieties within the series.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is optional depending on region	Daminozide day after sticking	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide @ 2500 ppm		





# **AMORE**®

Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	No pinch necessary	100 150 nnm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	Additional lighting	100 - 150 ppm N	Finish stage	
8 to 9 wks		is optional depending on region	Soil EC 1.2 - 1.5 pH 5.6 to 6.0	Daminozide @ 2500 to 3200 ppm	
(15 cm) 6 ½"					
8 to 10 wks					
(20 cm) 8"	3 plants per container				
8 to 10 wks					
(25 cm) 10"	3 plants per container				

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



Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide spray	Spray fungicide after transplant	
Week 5 to 15	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





### **CAPELLA™**

Petunia hybrida





**CAPELLA™ Rim Fuchsia** 

More varieties in the CAPELLA™ series:



- The perfect petunia performs well in propagation, the greenhouse AND for the end consumer
- Naturally controlled habit was selected for quart production but will also grow to fill a larger pot
- Blooms early enough for any market
- Mature height and width is 8 inches x 12 inches (25cm X 30xm)











### **CAPELLA™**

Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(8 - 10") 20 - 25 cm (10 - 14") 25- 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 – Daminozide @ 2000 to 2500 ppm

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is not required	Daminozide day after sticking	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide spray application @ 2000 to 2500 ppm		





## **CAPELLA™**

Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day		150, 200 nnm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	No pinch necessary	150 - 200 ppm N	In liner and	
8 to 9 wks		Additional lighting is	Soil EC 1.2 - 1.5	finish stages. Daminozide @ 2000	
(15 cm) 6 ½"		not required	pH 5.6 to 6.0		
8 to 10 wks					
(20 cm) 8"	3 plants per container				
8 to 10 wks					
(25 cm) 10"	3 plants per container				

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity <u>PGR</u> - Spray Daminozide 2,000 to 2,500 ppm and / or Paclobutrazol drench application at 1 to 2 ppm for finishing if required

Finishin	g pH	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplar	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide spray application	Spray fungicide after transplant	
Week 5 to	<b>15</b> 5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





### **CASCADIAS™**

Petunia hybrida





 Available in many unique bloom patterns and colors

- Early flowering with a trailing habit
- · Makes a showy premium basket
- Mature height and width is 14 inches x 18 inches (36cm x 46cm)

Arizona Sky

#### The CASCADIAS™ series:



CASCADIAS™ Iceberg



CASCADIAS™ Indian Summer



CASCADIAS™ Fuchsia



CASCADIAS™ Passion



CASCADIAS™ Blue Omri



CASCADIAS™ Indigo



CASCADIAS™ Purple Ice



CASCADIAS™ Pitaya



CASCADIAS™ Rim Violet Imp



CASCADIAS™ Autumn Mystery



CASCADIAS™ Purple Gem



CASCADIAS™ Chili Red



CASCADIAS™ Bicolor Cabernet



CASCADIAS™ Rim Magenta







### **CASCADIAS™**

Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

.

Width

Height

Spring / Summer Flowering

(14 - 18") 36 - 46 cm (12 - 14") 30 - 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 – Daminozide @ 2500 ppm mix if plants are aggressively growing.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is optional depending on region	Daminozide day after	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide spray at 2500 ppm if required		





### **CASCADIAS™**

Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	No pinch	150 200 mm N	
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	necessary	150 - 200 ppm N	
8 to 9 wks				finish stage -
(15 cm) 6 ½"		Additional lighting is optional depending on region	Soil EC 1.2 - 1.5 pH 5.6 to 6.0	Daminozide @ 2500 ppm
8 to 10 wks				
(20 cm) 8"	3 plants per container			
8 to 10 wks				
(25 cm) 10"	3 plants per container			

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity <u>PGR</u> - Spray Daminozide at 2,500 to 3,000 ppm and/or Paclobutrazol drench application at 1 to 2 ppm for finishing if required

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide	Spray fungicide after transplant	
Week 5 to 15	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutraval Dronch at		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size

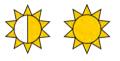




## **HIPPY CHICK™**

Petunia hybrida







**HIPPY CHICK™ Violet** 

Groovy New Plant for 2021!

Unique bloom shape with white edge stands out and attracts attention

Mounded habit works well in baskets and patio pots Blooms early enough for any market Mature Width 18" X 24" (46cm x 61cm)





## **HIPPY CHICK™**

Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority - Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(18 - 24") 46 – 61 cm (12 - 14") 30 - 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



Light extension in propagation is not required. The variety is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 – Daminozide @ 2500 ppm

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist		Daminozide day after sticking	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide/ Uniconazole tank mix if required		







## HIPPY CHICK™

Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
7 to 8wks	Average Day	No pinch	150, 200 mm N	
(15 cm) 6 ½ " pot	68° to 72°F (20° to 22°C)	necessary	150 - 200 ppm N	
8 to 9 wks				Finish stages
(20 cm) 8"	3 plants per container	Light is optional since Petunia are facultative long day	Soil EC 1.2 - 1.5 pH 5.6 to 6.0	Daminozide @ 2500 to 3200 ppm
8 to 10 wks				
(25 cm) 10"	3 plants per container			

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity <u>PGR</u> - Spray Daminozide 2,500 to 3,200 ppm and/or Paclobutrazol drench application at 1 to 2 ppm for finishing if required

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide/ Uniconazole tank mix if required	Spray fungicide after transplant	
Week 5 to 14	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size







# LITTLETUNIA®

Petunia hybrida





LITTLETUNIA®
White Grace





- · Excellent longevity all season long
- Early flowering
- Rain resistance is a key feature in this series
- Mature height and width is 8" x 14" (20cm x 36cm)

More varieties in the LITTLETUNIA® series:



LITTLETUNIA®
Bicolor Illusion



LITTLETUNIA®
Bright Red



LITTLETUNIA®
Blue Vein



LITTLETUNIA® Pink



LITTLETUNIA®
Pink Splash



LITTLETUNIA®

Purple Blue



LITTLETUNIA® Rose



LITTLETUNIA® Shiraz



LITTLETUNIA® Violet







# **LITTLETUNIA®**

Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering (10 - 14") 25- 36 cm (8 - 10") 20 - 25 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 − Daminozide @ 1500 to 2000 ppm should be sufficient to control growth on Littletunia™ series.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is not required	Daminozide day after sticking	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as required		





# **LITTLETUNIA®**

Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	No pinch	150, 200 mm N	
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	necessary	150 - 200 ppm N	In liner and finish stages.
7 to 8 wks			Soil EC 1.2 - 1.5	Daminozide @ 1500 to
(15 cm) 6 ½"		Additional lighting is not required	pH 5.6 to 6.0	2000 ppm
8 to 9 wks				
(20 cm) 8"	3 plants per container			

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity PGR - Spray Daminozide at 1500 to 2000 ppm for height control

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide	Spray fungicide after transplant	
Week 5 to 15	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A			

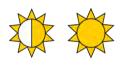




## ORCHID FROST™

Petunia hybrida







**ORCHID FROST™ Violet** 

Beautiful watercolor like pattern on large showy blooms
Mounded habit works well in baskets and patio pots
Blooms early enough for any market
Mature Height and Width
18" X 24" (46cm x 61cm)





## ORCHID FROST™

Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority - Number 2 out of 4 categories







Flowering time

......

Width

Height

Spring / Summer Flowering

(20 - 26") 51 - 66 cm (12 - 14") 30 - 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not need for a quality finish. Orchid Frost is very vigorous variety. Daminozide at 1500 ppm the day after sticking.

Week 4 – Daminozide @ 2500 ppm / Uniconazole @ 10 ppm tank mix.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist		Daminozide day after sticking	Day of sticking	Feeding through Mist
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide/ Uniconazole tank mix if required		





## ORCHID FROST™

Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
8 to 10 wks	Average Day	No pinch	150, 200 mm N	
(20 cm) 8"	68° to 72°F (20° to 22°C)	necessary	150 - 200 ppm N	In liner and finish stages.
8 to 10 wks		Light is optional	C-11 FC 4.2. 4 F	Daminozide @ 2500 ppm / Uniconazole @
(25 cm) 10"	3 plants per container	since Petunia are facultative long day	Soil EC 1.2 - 1.5 pH 5.6 to 6.0	10 ppm if plants are aggressively growing



Orchid Frost is a vigorous growing variety with large leaves and flowers-is best grown in larger containers

PGR - Spray Daminozide / Uniconazole tank mix to control height

Paclobutrazol drench application at 1 to 2 ppm for finishing if required

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide/ Uniconazole tank mix if required	Spray fungicide after transplant	
Week 5 to 15	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





# $RAY^{TM}$

Petunia hybrida









Sunshine imp. RAY™

- · Large flowers with a mounding habit makes for tidy baskets or great small pots
- · Early enough for any market
- · No pinching needed
- · Mature height and width is 12" x 14" (30cm x 36cm)

More varieties in the RAY™ series:









Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority - Number 2 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

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

Average Time	Temperature	Hormone	Fertilization	Fungicide	
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2	



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 – Daminozide @ 2500 ppm / Uniconazole @ 10 ppm tank mix if plants are aggressively growing.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is optional depending on region	Daminozide day after	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide spray application at 2500 ppm		







Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	No pinch	150 200 nnm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	necessary	150 - 200 ppm N		
8 to 9 wks				Finish stage	
(15 cm) 6 ½"		Additional lighting is optional depending on region	Soil EC 1.2 - 1.5 pH 5.6 to 6.0	Daminozide @ 2500 to 3200 ppm	
8 to 10 wks					
(20 cm) 8"	3 plants per container				
8 to 10 wks					
(25 cm) 10"	3 plants per container				

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



Additional Iron (Fe) or Manganese (Mn) may be required depending on water quality and alkalinity PGR - Spray Daminozide at 2,500 to 3,200 ppm and / or Paclobutrazol drench application at 1 to 2 ppm for finishing if required

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide	Spray fungicide after transplant	
Week 5 to 15	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size





## RIMarkable™

Petunia hybrida









Vigorous, mounded habit that works well in baskets and patio pots

Blooms early enough for any market

Mature Width 18" X 24" (46cm x 61cm)





## RIMarkable™

Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories







Flowering time

Spring / Summer

Height

Flowering

(18 - 24") 46 – 61 cm

(12 - 14") 30 - 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide	
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2	



Irrigation specification – Reduce mist as soon as possible



Light extension in propagation is not required. The variety is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 – Daminozide @ 2500 ppm.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist		Daminozide day after sticking	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide spray application at 2,500 ppm		







## RIMarkable™

Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
7 to 8 wks	Average Day		150, 200 nnm N		
(15 cm) 6 1/2" pot	68° to 72°F (20° to 22°C)	No pinch necessary	150 - 200 ppm N	Finish stone	
8 to 9 wks			Soil EC 1.2 - 1.5	Finish stage Daminozide @ 2500 to	
(20 cm) 8"	3 plants per container		pH 5.6 to 6.0	3200 ppm	
8 to 10 wks					
(25 cm) 10"	3 plants per container				

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



<u>Additional Iron (Fe) or Manganese (Mn)</u> may be required depending on water quality and alkalinity  $\underline{PGR}$  - Spray Daminozide @ 2,500 to 3,000 ppm and/or Paclobutrazol drench application at 1 to 2 ppm for finishing if required

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide	Spray fungicide after transplant	
Week 5 to	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size



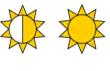




## SPLASH DANCE™

Petunia hybrida







SPLASH DANCE™ Moon Walk

Selected to hold its speckled pattern into the heat
Mounded habit works well in baskets and combos
Blooms early enough for any market
Mature Height and Width 18
inches X 24 inches (46cm x 61cm)

#### More varieties in the SPLASH DANCE™ series:



SPLASH DANCE™ Fuchsia Flamenco



SPLASH DANCE™ Rumba Rose



SPLASH DANCE™ Violet Vogue



SPLASH DANCE™ Poppin' Pink



SPLASH DANCE™ Bolero Blue



SPLASH DANCE™ Magenta Mambo



SPLASH DANCE™ Purple Polka







## SPLASH DANCE™

Petunia hybrida



#### **PROPAGATION TIPS**

Stick on priority - Number 2 out of 4 categories







Flowering time

nowening time

Width

Height

Spring / Summer Flowering (18 - 24") 46 - 61 cm (18 - 24") 46 - 61 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	No	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 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



The series is well branched so pinching is not need for a quality finish. Daminozide at 1500 ppm the day after sticking. Week 4 – Daminozide @ 2500 ppm spray application

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.0	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is optional depending on region	Daminozide day after sticking	Day of sticking	
Week 2	5.6 to 6.0	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.6 to 6.0	.90 to 1.0	Cool to 68 F	Feed 100 ppm to 150 ppm				
Week 4	5.6 to 6.0	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide@ 2500 spray application		







## SPLASH DANCE™

Petunia hybrida



#### **FINISHING TIPS**

Maintain lower pH levels for optimal Iron (Fe) and Manganese (Mn) availability to plants Cool temperature is best for high quality finishing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
6 to 7 wks	Average Day	No pinch	150 200 mm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	necessary	150 - 200 ppm N		
8 to 9 wks		Additional lighting	6 11 50 4 2 4 5	Finish stages	
(15 cm) 6 ½"		Additional lighting is optional depending on region	Soil EC 1.2 - 1.5 pH 5.6 to 6.0	Daminozide @ 2500 to 3200 ppm	
8 to 10 wks					
(20 cm) 8"	3 plants per container				
8 to 10 wks					
(25 cm) 10"	3 plants per container				

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



Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.6 to 6.0	1.0 to 1.2	65 to 68 f	feed 100 to 150 ppm	N/A	Daminozide/ Uniconazole tank mix if required	Spray fungicide after transplant	
Week 5 to 15	5.6 to 6.0	1.2 to 1.5	65 to 68 f	feed 100 to 150 ppm	N/A	Paclobutrazol Drench at 1 to 2 ppm		Paclobutrazol 1 to 2 ppm drench when plants reach 85% of desired size







### **PHLOXSTAR™**

Phlox drummondii









PHLOXSTAR™ White Improved

- Phloxstar is a rockstar in the garden
- Tested for easy rooting
- Very strong plant that will last all summer long
- Mature height and width is
   12 inches x 14 inches (30cm x 36cm)

More varieties in the PHLOXSTAR™ series:



Phloxstar™ Magenta



Phloxstar™ Red





### **PHLOXSTAR™**

Phlox drummondii



#### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

(14-16")

Height

Spring / Summer Flowering

36 - 41 cm

(12 - 14") 30 - 36 cm

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° - 68° (18° - 20° C)		Weeks 3-5 100 to 150 ppm N	Spray fungicide to control Botrytis and bacteria Week 2	



Irrigation specification – Spray adjuvant after sticking.



Application of IBA or K-IBA can hasten rooting. Lighting in propagation will hasten flowering response - Night interruption or extended day. A pinch is recommended the week prior to transplant or at transplant.

Rooting	pН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	6.0 / 6.5	0.80	72 / 74 F	50 ppm N in mist	Beneficial		Day of sticking	Feeding through Mist
Week 2	6.0 to 6.5	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	6.0 to 6.5	.80 to .90	Cool to 70 – 68 F	Feed 100 ppm to 150 ppm				
Week 4	6.0 to 6.5	.80 to .90	65 to 68 F	Feed 100 ppm to 150 ppm				
Week 5	6.0 to 6.5	0.9 to 1.0	65 to 68 F	Feed 100 ppm to 150 ppm		Daminozide as needed @ 1500 ppm	Spray for Powdery Mildew	





## PHLOXSTAR™

Phlox drummondii



#### **FINISHING TIPS**

Spray for Powdery Mildew control
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 is	100 150 mm N		
(12 cm) 5" pot	60° - 68° (16° - 20° C)	recommended	100 - 150 ppm N		
8 to 9 wks		Phlox d. responds to	Soil EC 0.9 - 1.2	In liner and finish stages	
(15 cm) 6 ½"	60° - 68° (16° - 20° C)	long days to hasten flowering	pH 6.0 to 6.5	illisti stages	
8 to 9 wks					
(20 cm) 8"	3 plants per container				

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



<u>Consistent soil moisture levels are best</u> – allow soil to dry slightly between irrigations Scout for Aphids and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	6.0 to 6.5	0.9 to 1.2	65 to 68 f	feed 100 to 150 ppm		Daminozide as needed	Spray fungicide after transplant	Daminozide @ 2000 to 2500 ppm
Week 6 to	6.0 to 6.5	.09 to 1.2	60 to 68 f	feed 100 to 150 ppm	Optional	Paclobutraz ol Drench		If plants are growing under warm conditions, Paclobutrazol drench application at 0.25 to 0.5





### **MEGA PAZZAZ™**

Portulaca oleracea







**MEGA PAZZAZ Pink Twist** 

Brand new series for 2021
MEGA PAZZAZ™ has extra large blooms on a moderate trailing habit

Well suited for gallons and hanging baskets

Perfect for heat tolerant/drought tolerant programs

Mature Height and Width 14 inches X 24 inches (36cm x 61cm)

More varieties in the MEGA PAZZAZ™ series:



MEGA PAZZAZ™ Mango Twist



MEGA PAZZAZ™ Red



MEGA PAZZAZ™ Purple



MEGA PAZZAZ™ Gold



MEGA PAZZAZ™ Orange



MEGA PAZZAZ™ Dark Pink







### **MEGA PAZZAZ™**

Portulaca oleracea



#### **PROPAGATION TIPS**

Stick on priority – Number 1 out of 4 categories







Flowering time

Width

Height

Late Spring / Summer Flowering

(18 - 24") 46- 61 cm

(14 - 16") 36 - 41 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°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 N	Day of sticking & Week 2



**Irrigation specification** – Reduce mist as soon as possible/excess misting will create uneven rooting and delay rooting



This genera is top priority for sticking. Remove plants from box upon receiving allowing air-movement around bags. Daminozide at 1500 ppm the day after sticking. Depending on growth, pinch week 3 or at transplant to allow improved branching.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is not required	Daminozide day after sticking	Day of sticking	Feeding through Mist
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	68 to 70 F	feed 100 to 150 ppm		Daminozide as required		







### **MEGA PAZZAZ™**

Portulaca oleracea



#### **FINISHING TIPS**

Allow plants to dry completely between irrigations

Maintain warm temperatures allowing plants to develop

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
5 to 6 wks	Average Day	Pinch 1 to 2 times	150, 200 mm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)		150 - 200 ppm N	Daminozide @ 2500 ppm or tank mix of	
6 to 7 wks		Additional lighting will hasten	Soil EC 1.0 - 1.2	Daminozide / Uniconazole for	
(15 cm) 6 ½"		flowering under short days	pH 5.8 to 6.2	finishing	
7 to 9 wks					
(20 cm) 8"	3 plants per container				

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



<u>PGR</u> - Spray Daminozide / Uniconazole tank mix to control height Scout for Aphids, Thrips and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.8 to 6.2	1.0 to 1.2	68 to 72 f	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	
Week 5 to 12	5.8 to 6.2	1.2 to 1.5	68 to 72 f	feed 100 to 150 ppm		Daminozide @ 2500 ppm or tank mix of Daminozide / Uniconazole for finishing		







### PAZZAZ NANO™

Portulaca oleracea







PAZZAZ™ NANO Orange Twist

- Naturally compact, trailing habit that works well for small and mid-sized containers
- Perfect for heat tolerant/drought tolerant programs
- Available in a wide array of vibrant colors
- Mature height and width is 8 inches x 12 inches (20cm x 30cm)

#### More varieties in the PAZZAZ NANO™ series:



PAZZAZ™ NANO Yellow Twist



PAZZAZ™ NANO Gold



PAZZAZ™ NANO Tropical Punch



PAZZAZ™ NANO Fuchsia Improved



PAZZAZ NANO™ Purple



PAZZAZ NANO™ Candy Pink



PAZZAZ NANO™ Fuchsia



PAZZAZ NANO™ Yellow



PAZZAZ NANO™ Hot Pink



PAZZAZ NANO™ Orange







### PAZZAZ NANO™

Portulaca oleracea



#### **PROPAGATION TIPS**

Stick on priority - Number 1 out of 4 categories







Flowering time

Width

Height

Late Spring / Summer Flowering

(10 - 12") 25- 30 cm (8 - 10") 20 - 25 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°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 N	Day of sticking & Week 2



**Irrigation specification** – Reduce mist as soon as possible/excess misting will create uneven rooting and delay rooting



This genera is top priority for sticking. Remove plants from box upon receiving allowing air-movement around bags. Daminozide at 1500 ppm the day after sticking. Depending on growth, pinch week 3 or at transplant to allow improved branching.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is not required	Daminozide day after sticking	Day of sticking	Feeding through Mist
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	68 to 70 F	feed 100 to 150 ppm		Daminozide as required		







### PAZZAZ NANO™

Portulaca oleracea



#### **FINISHING TIPS**

Allow plants to dry completely between irrigations

Maintain warm temperatures allowing plants to develop

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
5 to 6 wks	Average Day	Pinch	150 200 ppm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	- Additional lighting	150 - 200 ppm N	Daminozide @ 2500 ppm for finishing if required	
6 to 7 wks		will hasten	Soil EC 1.0 - 1.2		
(15 cm) 6 ½"		flowering under short days	pH 5.8 to 6.2		
7 to 9 wks					
(20 cm) 8"	3 plants per container				

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



<u>PGR</u> - Spray Daminozide control height Scout for Aphids, Thrips and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.8 to 6.2	1.0 to 1.2	68 to 72 f	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	
Week 5 to 12	5.8 to 6.2	1.2 to 1.5	68 to 72 f	feed 100 to 150 ppm		Daminozide @ 2500 ppm for finishing		







# **PAZZAZ<sup>TM</sup>**

Portulaca oleracea







PAZZAZ™ Red Flare Improved

- Moderate trailing habit that works well for gallon and hanging basket production
- Perfect for heat tolerant/drought tolerant programs
- Available in a wide array of vibrant colors
- Mature height and width is 12 inches x 14 inches (30cm x 36cm)

#### More varieties in the PAZZAZ™ series:



PAZZAZ™ Fuchsia



PAZZAZ™ Tangerine



**PAZZAZ™ White** 



PAZZAZ™ Yellow imp.





# PAZZAZ™

Portulaca oleracea



#### **PROPAGATION TIPS**

Stick on priority - Number 1 out of 4 categories







Flowering time

Width

Height

Late Spring / Summer Flowering

(14 - 16") 36- 41 cm (10 - 12") 25 - 30 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide	
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°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 N	Day of sticking & Week 2	



**Irrigation specification** – Reduce mist as soon as possible/excess misting will create uneven rooting and delay rooting



This genera is top priority for sticking. Remove plants from box upon receiving allowing air-movement around bags. Daminozide at 1500 ppm the day after sticking. Depending on growth, pinch week 3 or at transplant to allow improved branching.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Additional lighting is not required	Daminozide day after sticking	Day of sticking	Feeding through Mist
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	68 to 70 F	feed 100 to 150 ppm		Daminozide as required		





# **PAZZAZ<sup>TM</sup>**

Portulaca oleracea



#### **FINISHING TIPS**

Allow plants to dry completely between irrigations

Maintain warm temperatures allowing plants to develop

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
5 to 6 wks	Average Day		150, 200 nnm N		
(12 cm) 5" pot	68° to 72°F (20° to 22°C)	Pinch	150 - 200 ppm N	Daminarida @ 3500 ann	
6 to 7 wks		Additional lighting will hasten flowering	Soil EC 1.0 - 1.2	Daminozide @ 2500 ppm for finishing	
(15 cm) 6 ½"		under short days	pH 5.8 to 6.2		
7 to 9 wks					
(20 cm) 8"	3 plants per container				

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



<u>PGR</u> - Spray Daminozide control height Scout for Aphids, Thrips and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.8 to 6.2	1.0 to 1.2	68 to 72 f	feed 100 to 150 ppm		Daminozide as needed	Drench fungicide after transplant	
Week 5 to 12	5.8 to 6.2	1.2 to 1.5	68 to 72 f	feed 100 to 150 ppm		Daminozide @ 2500 ppm for finishing		





### LION CUB PPAF

Rudbeckia hybrida

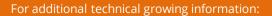






- Cold Hardiness 8 10
- Pom-pom golden flowers do not fade or become brown with age
- Natural June through September flowering response
- Mature height and width is
   30 cm x 45 cm (12 x 18 inches)





### LION CUB PPAF

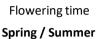
Rudbeckia hybrida



#### **PROPAGATION TIPS**

Stick on priority – Number 2 out of 4 categories





**Flowering** 



Width 41 - 46 cm (16 - 18")



Height 28 - 30 cm (11 - 12")

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



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



Spray adjuvant the day of sticking. Spray broad spectrum fungicide to prevent Botrytis day of sticking and week 2.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.6 / 6.2	0.80	21 / 22 C	50 ppm N in mist	Required 12 hr daylength		Day of sticking	
Week 2	5.6 to 6.2	.80 to .90	21 / 22 C	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.5	.90 to 1.0	Cool to 20 / 21 C	Feed 100 ppm N				
Week 4	5.8 to 6.5	.90 to 1.0	20 to 21 C	Feed 100 ppm N				
Week 5	5.8 to 6.5	.90 to 1.0	20 to 21 C	Feed 100 to 150 ppm		Should not be required		







### LION CUB PPAF

Rudbeckia hybrida



#### **FINISHING TIPS**

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

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
8 to 10 wks	Average Day	Pinch not	400 450 N		
15 cm (1 gallon)	(20° to 21°C)	required/	100 - 150 ppm N	Should not be required	
8 to 10 wks	2	short day flowering	Soil EC 0.8 – 1.0	Naturally compact	
20 cm (2 gallon)	3 plants per container	response	pH 5.8 to 6.5		

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



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

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 6 Transplant	5.8 to 6.2	0.8 to 1.0	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	0.8 to 1.0	18° to 20°C	feed 150 to 200 ppm			Spray fungicide in finishing protocols	Control of Bacterial Leaf Blights







## **SALLYFUN™**

Salvia farinacea









**Blue Lagoon** 

- Fast growth rate and early bloomer
- Full plant with upright habit
- Strong flower pedicle
- Flower timing matched across the colors

More varieties in the SALLYFUN™ series:

SALLYFUN™ Bicolor Blue



SALLYFUN™ Blue Ice

### Medium



SALLYFUN™ Blue



SALLYFUN™ Deep Ocean



SALLYFUN™ Pure White

### Large



**SALLYFUN™** Blue Emotion



SALLYFUN™ Sky Blue



**SALLYFUN™ XL Blue** 



**SALLYFUN™** Snowhite







## SALLYFUN™

Salvia farinacea



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(10 - 14") 25- 36 cm (14 - 20") 36 - 46 cm

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 65° - 70° (18° - 21° C)		Weeks 3-4 100 to 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



Spray adjuvant at sticking. Daminozide at 2000 ppm the day after sticking. Depending on growth, pinch week 3 or at transplant to allow improved branching.

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Neutral	Daminozide day after sticking	Day of sticking	Feeding through Mist
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as required		







## SALLYFUN™

Salvia farinacea



#### **FINISHING TIPS**

Allow plants to dry between irrigations
Sallyfun Salvia will flower easily for early season requirements

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
5 to 6 wks	Average Day		150, 200 nnm N	Daminozide @ 2500 ppm	
(12 cm) 5" pot	65° to 68°F (18° to 20°C)	Pinch	150 - 200 ppm N	for finishing	
6 to 7 wks		Day Neutral	Soil EC 1.0 - 1.5	Paclobutrazol 1 to 2 ppm	
(15 cm) 6 ½"		,	pH 5.8 to 6.2	drench	
7 to 9 wks					
(20 cm) 8"	3 plants per container				
7 to 9 wks					
(25 cm) 10"	3 plants per container				

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



<u>PGR</u> - Spray Daminozide for height control / Paclobutrazol drench for finishing Scout for Aphids, Leafminors and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.8 to 6.2	1.0 to 1.2	68 to 72 f	feed 100 to 150 ppm		Daminozide @ 2500 ppm as needed	Drench fungicide after transplant	
Week 5 to 12	5.8 to 6.2	1.2 to 1.5	68 to 72 f	feed 100 to 150 ppm		Paclobutrazol @ 1 to 2 ppm drench to finish		Paclobutrazol drench when flower bud emerge





# $\mathsf{TALYA}^\mathsf{TM}$

Sanvitalia speciosa







**TALYA™** Great Yellow

- · Heat and weather tolerant
- Naturally branched so no pinch necessary
- Great in 12 cm/quarts item and combinations
- Mature height and width is 10" x 14" (25 cm x 36 cm)



**TALYA™** Bright







## **TALYA**<sup>TM</sup>

Sanvitalia speciosa



#### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(15 - 20") 38 - 51 cm (8 - 10") 20 - 25 cm

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



- Spray adjuvant at sticking. Remove from mist as soon as possible



- Maintain warm temperatures allowing plants to develop
- Average daily temperature of 70 F
- Spray fungicide to control botrytis

Rooting	pН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.5 / 6.2	0.80	72 / 74 F	50 ppm N in mist			Day of sticking	
Week 2	5.5 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.5 to 6.2	.80 to .90	Cool to 68 – 70 F	Feed 100 ppm N				
Week 4	5.5 to 6.2	.80 to .90	68 to 70 F	Feed 100 ppm N		Should not be required		





### $\mathsf{TALYA}^\mathsf{TM}$

Sanvitalia speciosa



#### **FINISHING TIPS**

Allow soil to dry between irrigations

Maintain a low EC level for proper growth and sizing of plant

Transplant liners when plants are rooted and actively growing

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 8 wks	Average Day		100 135 name N	
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Pinch –No	100 - 125 ppm N	Daminozide @ 2000 2500
8 to 10 wks		Daylength Neutral	Soil EC 0.8 - 1.0	
(15 cm) 6 ½"	68° - 70° (20° - 21° C)		pH 5.5 to 6.2	

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



<u>Saturated soil</u> conditions will increase disease pressure <u>Spray</u> broad spectrum fungicide after transplant <u>Scout</u> and spray for Powdery Mildew <u>Scout</u> for Aphids, Fungus Gnats and Shore Flies on regular basis

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.5 to 6.2	0.8 to 1.0	65 to 68 f	feed 100 to 125 ppm N	Day neutral	Daminozide @ 2000 2500	Drench fungicide at transplant	
Week 6 to 13	5.5 to 6.2	0.8 to 1.0	65 to 68 f	feed 100 to 125 ppm N			Spray for Powdery Mildew	





### BLESSING™

Scaevola aemula







BLESSING™ Bicolor Lavender

Vigorous plant habit
Large flowers
Semi upright spreading structure is perfect for hanging baskets and combinations
Semi upright structure is perfect for quarts and larger pots
Well suited for heat tolerant programs

### More varieties in the BLESSING™ lineup:



**BLESSING™** Lavender



**BLESSING Pink ™** 





### BLESSING™

Scaevola aemula



#### **PROPAGATION TIPS**

Stick on priority – Number 4 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(10 - 16") 25 - 41 cm (6 - 10") 20 - 25 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 100 to 150 ppm N	Apply broad spectrum Week 2



**Misting specification** - Remove from mist as soon as possible Do not over-mist or saturate soil - Spray adjuvant at sticking



- Maintain warm temperatures allowing plants to develop.
- Spray Daminozide at 2000 to 2500 ppm as required
- Pinch is recommended week 4 or at transplant

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	72 / 74 F	Feed 100 ppm to 150 ppm	Not required			
Week 4	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm	Not required			
Week 5	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm	Not required	Daminozide as needed		Daminozide @ 2000 to 2500 ppm





### BLESSING™

Scaevola aemula



#### **FINISHING TIPS**

Keep the temperatures moderately warm to allow plants to continue to develop (average daily temperature at 68 to 70 F (20 to 21 C)

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	Pinch –Yes	150 200 nnm N	Spray Daminozide @
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Night	150 - 200 ppm N	2500 to 3750 ppm
8 to 9 wks		interruption or extended	Soil EC 1.0 - 1.2	Paclobutrazol drench @ 1 to 2 ppm
(15 cm) 6 ½"		day- Optional	pH 5.8 to 6.2	@ 1 το 2 μμπ
8 to 9 wks				
(20 cm) 8"	3 plants per container			

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



<u>PGR - Spray Daminozide</u> at 2500 to 3750 ppm for finishing plants Paclobutrazol drench application at 1 to 2 ppm for finishing if required <u>Drench</u> a broad spectrum fungicide after transplant <u>Scout</u> for Aphids and Fungus Gnats and Mites

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	68 to 70 f	feed 100 to 150 ppm		B-9 as needed	Spray fungicide after transplant	Spray Daminozide @ 2500 to 3750 ppm
Week 6 to 13	5.8 to 6.2	1.0 to 1.2	68 to 70 f	feed 100 to 150 ppm		Paclobutrazol Drench if required		Paclobutrazol drench @ 1 to 2 ppm





### TOUCH™

Scaevola aemula







**TOUCH™** Indigo

The White Touch™ variety remains pure white even in low temp White Touch ™ and Blue Touch™ are great for baskets and combos Mature height and width is 30 cm x 20 cm (12 x 8 inches)

Purple Haze™ flowers open all at the same time with strong color, its semi upright structure is perfect for quarts and larger

More varieties in the TOUCH™ lineup:



**TOUCH™** Deep Pink



**TOUCH™** Blue



**TOUCH™ White** 



**TOUCH™** Baby Pink



Purple Haze™







### TOUCH™

Scaevola aemula



#### **PROPAGATION TIPS**

Stick on priority – Number 4 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(10 - 16") 25 - 41 cm (6 - 10") 20 - 25 cm

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 68° - 70° (20° - 21° C)		Weeks 3-5 100 to 150 ppm N	Apply broad spectrum Week 2



**Misting specification** - Remove from mist as soon as possible Do not over-mist or saturate soil - Spray adjuvant at sticking



- Maintain warm temperatures allowing plants to develop.
- Spray Daminozide at 2000 to 2500 ppm as required
- Pinch is recommended week 4 or at transplant

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Not required		Day of sticking	
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist	Not required		Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	72 / 74 F	Feed 100 ppm to 150 ppm	Not required			
Week 4	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm	Not required			
Week 5	5.8 to 6.2	1.0 to 1.2	70 F	Feed 100 to 150 ppm	Not required	Daminozide as needed		Daminozide @ 2000 to 2500 ppm





### TOUCH™

Scaevola aemula



#### **FINISHING TIPS**

Keep the temperatures moderately warm to allow plants to continue to develop (average daily temperature at 68 to 70 F (20 to 21 C)

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
6 to 7 wks	Average Day	Pinch –Yes	150, 200 nnm N	Spray Daminozide @
(12 cm) 5" pot	68° - 70° (20° - 21° C)	Night	150 - 200 ppm N	2500 to 3750 ppm
8 to 9 wks		interruption or extended	Soil EC 1.0 - 1.2	Paclobutrazol drench @ 1 to 2 ppm
(15 cm) 6 ½"		day- Optional	pH 5.8 to 6.2	ω 1 το 2 ρρπ
8 to 9 wks				
(20 cm) 8"	3 plants per container			

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



<u>PGR - Spray Daminozide</u> at 2500 to 3750 ppm for finishing plants Paclobutrazol drench application at 1 to 2 ppm for finishing if required <u>Drench</u> a broad spectrum fungicide after transplant <u>Scout</u> for Aphids and Fungus Gnats and Mites

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 5 Transplant	5.8 to 6.2	1.0 to 1.2	68 to 70 f	feed 100 to 150 ppm		B-9 as needed	Spray fungicide after transplant	Spray Daminozide @ 2500 to 3750 ppm
Week 6 to 13	5.8 to 6.2	1.0 to 1.2	68 to 70 f	feed 100 to 150 ppm		Paclobutrazol Drench if required		Paclobutrazol drench @ 1 to 2 ppm





## **VANESSA<sup>TM</sup>**

Verbena x hortensis











**VANESSA™** Magenta

- Strong show of color at retail and in the garden
- Tested for mildew tolerance and cycling of color
- Mature height and width is 10 inches x 18 inches (25cm x 46cm)

#### More varieties in the VANESSA™ series:









## **VANESSA<sup>TM</sup>**

Verbena x hortensis



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

Width

Height

Spring / Summer Flowering

(14 - 20") 36 - 51 cm (10 - 14") 25- 36 cm

Average Time	Temperature	Hormone	Fertilization	Fungicide
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	Not required	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 65° - 70° (18° - 21° C)		Weeks 3-4 100 to 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



Spray adjuvant at sticking . Daminozide at 2000 ppm the day after sticking No pinch is necessary for producing an excellent liner

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Neutral	Daminozide day after sticking	Day of sticking	Feeding through Mist
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as required		





## VANESSA™

Verbena x hortensis



### **FINISHING TIPS**

Verbena respond well to Negative DIF to control height Verbena Vanessa™ will flower easily for early season requirements

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator
5 to 6 wks	Average Day		150, 300 and N	Daminozide @ 2500
(12 cm) 5" pot	60° to 68°F (16° to 20°C)	No pinch is	150 - 200 ppm N	ppm for finishing
6 to 7 wks		necessary	Soil EC 1.0 - 1.5	Paclobutrazol @ 1 to 2
(15 cm) 6 ½"		Day Neutral	pH 5.8 to 6.2	ppm drench to finish
7 to 8 wks				
(20 cm) 8"	3 plants per container			
7 to 8 wks				
(25 cm) 10"	3 plants per container			

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



<u>PGR</u> - Spray Daminozide for height control / Paclobutrazol drench for finishing Scout for Aphids, Leafminors, Thrips and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.8 to 6.2	1.0 to 1.2	60 to 68 f	feed 100 to 150 ppm		Daminozide @ 2500 ppm as needed	Drench fungicide after transplant	
Week 5 to 12	5.8 to 6.2	1.2 to 1.5	60 to 68 f	feed 100 to 150 ppm		Paclobutrazol @ 1 to 2 ppm drench		Paclobutrazol drench when plants reach 85% of desired size





### **VANESSA™ COMPACT**

Verbena x hortensis





- Tested for mildew tolerance and cycling of color
- This sub series of high performing
   Vanessa has a naturally controlled habit
- Little to no PGR needed
- Mature height and width is 8 inches x 12 inches (25cm X 30cm)

### **VANESSA™ COMPACT Bordeaux**

#### More varieties in the VANESSA™ COMPACT series:



VANESSA™ COMPACT



VANESSA™ COMPACT Lime



VANESSA™ COMPACT Bicolor Purple



VANESSA™ COMPACT Neon Pink



VANESSA™ COMPACT Bicolor Rose



VANESSA™ COMPACT Optik Lavender



VANESSA™ COMPACT Deep Pink



VANESSA™ COMPACT Pink



VANESSA™ COMPACT Lavender



VANESSA™ COMPACT Red



VANESSA™ COMPACT Violet



**VANESSA™ COMPACT White** 







### **VANESSA™ COMPACT**

Verbena x hortensis



### **PROPAGATION TIPS**

Stick on priority – Number 3 out of 4 categories







Flowering time

. . . . .

Width

Height

Spring / Summer Flowering (10 - 14") 25 - 36 cm (6 - 10") 15- 20 cm

Average Time	Temperature Hormone Fertilization		Fungicide	
4 weeks	Weeks 1 - 2 70°-72° F (21° - 22°C)	Not required	Weeks 1-2 50 ppm N	Spray fungicide to control Botrytis and bacteria day of sticking
	Weeks 3 - 4 65° - 70° (18° - 21° C)		Weeks 3-4 100 to 150 ppm N	Day of sticking & Week 2



Irrigation specification – Reduce mist as soon as possible



Spray adjuvant at sticking . Daminozide at 2000 ppm the day after sticking No pinch is necessary for producing an excellent liner

Rooting	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 1	5.8 / 6.2	0.80	72 / 74 F	50 ppm N in mist	Neutral	Daminozide day after sticking	Day of sticking	Feeding through Mist
Week 2	5.8 to 6.2	.80 to .90	72 / 74 F	50 ppm N in mist			Second fungicide app	
Week 3	5.8 to 6.2	.90 to 1.0	Cool to 68 / 70 F	Feed 100 ppm to 150 ppm				
Week 4	5.8 to 6.2	1.0 to 1.2	65 to 68 F	feed 100 to 150 ppm		Daminozide as required		





### **VANESSA™ COMPACT**

Verbena x hortensis



#### **FINISHING TIPS**

Verbena respond well to Negative DIF to control height
Verbena Vanessa™ will flower easily for early season requirements

Average Time (from liners)	Temperature	Pinch/ Daylength Modification	Fertilization	Plant Growth Regulator	
5 to 6 wks	Average Day		150, 200 nnm N	Daminozide @ 2500 ppm	
(12 cm) 5" pot	60° to 68°F (16° to 20°C)	No pinch is necessary	150 - 200 ppm N	for finishing	
6 to 7 wks		Day Neutral	Soil EC 1.0 - 1.5	Paclobutrazol @ 1 to 2 ppm	
(15 cm) 6 ½"		·	pH 5.8 to 6.2	drench to finish	
7 to 8 wks					
(20 cm) 8"	3 plants per container				
7 to 8 wks					
(25 cm) 10"	3 plants per container				

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



<u>PGR</u> - Spray Daminozide for height control / Paclobutrazol drench for finishing Scout for Aphids, Leafminors, Thrips and Whiteflies

Finishing	рН	EC	Temp	Feed	Light	PGR	Fungicide	Comments
Week 4 Transplant	5.8 to 6.2	1.0 to 1.2	60 to 68 f	feed 100 to 150 ppm		Daminozide @ 2500 ppm as needed	Drench fungicide after transplant	
Week 5 to 12	5.8 to 6.2	1.2 to 1.5	60 to 68 f	feed 100 to 150 ppm		Paclobutrazol @ 1 to 2 ppm drench		Paclobutrazol drench when plants reach 85% of desired size





