

ANNUAL  
PROPAGATION

# VERBENA EMPRESS® SUN KISS

*Verbena x hybrida*



## TRAY & ROOTING

|                               |                                 |
|-------------------------------|---------------------------------|
| Form                          | <b>Vegetative Cutting (URC)</b> |
| Rooting Hormone?              | <b>No</b>                       |
| Tray Size                     | <b>72, 84, 105</b>              |
| Plants Per Cell               | <b>1</b>                        |
| Days In Mist                  | <b>7-10</b>                     |
| Wks. From Stick To Transplant | <b>3-4</b>                      |
| Propagation Pinch?            | <b>Yes</b>                      |
| Weeks To Pinch                | <b>3</b>                        |

## FERTILITY

|                         |                                       |
|-------------------------|---------------------------------------|
| Fertilize Through Mist? | <b>None</b>                           |
| Fertilizer Rate         | <b>100-150ppm N</b>                   |
| EC Range                | <b>Moderate: (2.0-3.5 mS via SME)</b> |
| pH Range                | <b>5.6-6.2</b>                        |

## TEMPERATURE

|                         |                          |
|-------------------------|--------------------------|
| Average Soil Temp       | <b>72-75°F (22-24°C)</b> |
| Average Air Temp (Day)  | <b>75-80°F (24-27°C)</b> |
| Average Air Temp(Night) | <b>68-72°F (20-22°C)</b> |

## IRRIGATION

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| Irrigation Frequency | <b>Level 3: Keep media moderately moist with mild dry cycles</b> |
|----------------------|------------------------------------------------------------------|

## LIGHT

|                      |             |
|----------------------|-------------|
| Daylength Neutral?   | <b>Yes</b>  |
| Supplemental         | <b>None</b> |
| Benefits From Shade? | <b>No</b>   |

## POTENTIAL DISEASES

Botrytis, Rhizoctonia, Powdery Mildew

## POTENTIAL PESTS

Spider Mites, Thrips, Whitefly

## PGR SUGGESTIONS

- Naturally compact.
- B-Nine (85% Daminozide) at 1500ppm + Florel (3.9% Ethephon) at 500ppm tank mix

## CULTIVAR LIST

Blue, Pink, Red, White



'Blue'

## TIPS

- Mist until roots begin to push into medium. Excessive misting can result in disease and nutrient leaching.
- Ensure light levels are at no less than 1,000-2,000 fc (10,500-21,500 lux) during rooting. After cuttings have established roots, increase light levels to 2,500-4,500 fc (27,000-48,500 lux) minimum.

## WE'RE HERE TO HELP YOU GROW

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ANNUAL  
FINISHING

# VERBENA EMPRESS® SUN KISS

*Verbena x hybrida*



| CONTAINER SIZE | PLANTS PER POT | TRANSPLANT TO FINISH (WEEKS) |
|----------------|----------------|------------------------------|
|----------------|----------------|------------------------------|

**4 in. (10 cm) and up**      **1**      **4-8**

**6 in. (15 cm) and up**      **1**      **6-10**

**10 in. (22 cm) and up**      **3-5**      **7-10**

## FERTILITY

Fertilizer Rate      **150-200 ppm N**

EC Range      **Moderate: (2.0-3.5 mS via SME)**

pH Range      **5.8-6.3**

## TEMPERATURE

Day Temperature      **73-80°F (23-27°C)**

Night Temperature      **60-68°F (16-20°C)**

## IRRIGATION

Irrigation Frequency      **Level 3: Keep media moderately moist with mild dry cycles**

## LIGHT

Daylength Neutral?      **Yes**

Optimum Light Level      **5,000-8,000 fc (53,800-86,100 lux)**

Supplemental      **None**

Benefits From Shade?      **No**

## PINCHING

Finishing Pinch?      **Yes**

Transplant to Pinch (days)      **7-14**

## POTENTIAL DISEASES

Botrytis, Rhizoctonia, Powdery Mildew

## POTENTIAL PESTS

Spider Mites, Thrips, Whitefly

## PGR SUGGESTIONS

- 300-500ppm Florel (3.9% Ethephon) / 1500-2500ppm B-Nine (85% Daminozide) tank mix sprayed 1- 2 weeks after transplant to promote branching., this can replace pinching. Additional applications can be made but might delay flowering.
- B-Nine (85% Daminozide) at 2500ppm can be used to reduce plant stretch.



'Red'

## TIPS

- Excess phosphorus-containing fertilizer may cause soft growth and internode stretch.
- Low temperatures decelerate growth and may cause leaf yellowing. As with all Verbena, powdery mildew is best prevented and controlled by dry leaves and low humidity combined with preventative sprays and early detection.
- A hard Pinch (above the 4th or 5th set of leaves) once plant roots reach the edge of the finished container will promote basal branching. Additional pinching will improve plant fullness.
- Verbena growth responds well to negative DIF.

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