## TRAY & ROOTING

<table>
<thead>
<tr>
<th>Trait</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Unrooted Cuttings</td>
</tr>
<tr>
<td>Rooting Hormone</td>
<td>Yes</td>
</tr>
<tr>
<td>Tray Size</td>
<td>72, 105</td>
</tr>
<tr>
<td>Plants Per Cell</td>
<td>1</td>
</tr>
<tr>
<td>Wks. From Stick To Transplant</td>
<td>4-6 weeks</td>
</tr>
<tr>
<td>Pinch?</td>
<td>Yes</td>
</tr>
<tr>
<td>Days To Pinch</td>
<td>21-25 days</td>
</tr>
</tbody>
</table>

## FERTILITY

<table>
<thead>
<tr>
<th>Trait</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilize Through Mist?</td>
<td>No</td>
</tr>
<tr>
<td>Fertilizer Rate</td>
<td>50-75 ppm</td>
</tr>
<tr>
<td>EC Range</td>
<td>Moderate</td>
</tr>
<tr>
<td>pH Range</td>
<td>5.4-6.0</td>
</tr>
</tbody>
</table>

## TEMPERATURE

<table>
<thead>
<tr>
<th>Trait</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Soil Temperature</td>
<td>High</td>
</tr>
</tbody>
</table>

## IRRIGATION

<table>
<thead>
<tr>
<th>Trait</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation Frequency</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

## LIGHT

<table>
<thead>
<tr>
<th>Trait</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photoperiodic requirements</td>
<td>Long day</td>
</tr>
<tr>
<td>Supplemental</td>
<td>Optional</td>
</tr>
<tr>
<td>Benefits From Shade?</td>
<td>No</td>
</tr>
</tbody>
</table>

## POTENTIAL DISEASES

Botrytis, downy mildew, powdery mildew

## POTENTIAL PESTS

spider mites, aphids, whitefly

## PGR SUGGESTIONS

- Optional 300-500 ppm Florel (*Ethephon*)
- Optional 1500-2500 B-Nine (*Daminozide*)

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**TIPS**

- A preventative fungicide root application is recommended.
PERENNIAL

FINISHING

**Eupatorium rugosum** *(Ageratina altissima)*

‘Chocolate’

**VERNALIZATION**

- **Vernalization Required?** Yes
- **Vernalization Duration Minimum** 6-8 weeks
- **Vernalization Temperature** 35-40°F (1.6-4.4°C)

<table>
<thead>
<tr>
<th>CONTAINER SIZE</th>
<th>PLANTS PER POT</th>
<th>TRANSPLANT TO FINISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 in./Gal. (15-16 cm)</td>
<td>1</td>
<td>8-10 weeks</td>
</tr>
<tr>
<td>8-10 in. (19-22 cm)</td>
<td>2-3</td>
<td>10-12 weeks</td>
</tr>
</tbody>
</table>

**FERTILITY**

- **Fertilizer Rate** 100-150 ppm N
- **EC Range** Moderate
- **pH Range** 5.8-6.2

**TEMPERATURE**

- **Day Temperature** 65-75°F (18-24°C)
- **Night Temperature** 55-65°F (13-18°C)

**IRRIGATION**

- **Irrigation Frequency** Moderate

**LIGHT**

- **Photoperiodic requirements** Long day
- **Supplemental?** None
- **Benefits From Shade?** No

**PINCHING**

- **Finishing Pinch?** Yes

**POTENTIAL DISEASES**

- Botrytis, downy mildew, powdery mildew

**POTENTIAL PESTS**

- Spider mites, aphids, whitefly

**PGR SUGGESTIONS**

- Bonzi (Paclobutrazol) 5-40ppm spray
- 5-8 ppm Sumagic (Uniconazole)

**TIPS**

- The richest foliage color is achieved under full sun growing conditions.
- Dry moderately between waterings to limit stretch and tone plant.

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HAVE ANY GOOD PHOTOGRAPHY?

Text or email your largest possible sized photo to marketing.NA@DummenOrange.com

(Please include the cultivar/variety of the plant in your correspondence)

By submitting a photograph via these methods, we reserve the right to use said photos in promotional, technical, and any other form Dümmen Orange NA sees fit, without citing the original source.
PERENNIAL

FEATURES AND BENEFITS

Eupatorium rugosum (Ageratina altissima) 'Chocolate'

KEY INFORMATION

First Year Flowering? No
Bloom Time Summer to Early Autumn
Exposure Full Sun
Hardiness Zone 5-9
Height 18-24 inches (46-60 cm)
Garden Spacing 24-36 inches (60cm-90 cm)

DESCRIPTION

‘Chocolate’ remains one of the most popular Joe-pye weed available on the market. With its crisp white blooms atop rich cocoa foliage, it’s easy to see why. This species was reclassified as Ageratina altissima but is still commonly known as Eupatorium rugosum.

CONSUMER APPEAL

• With its voluptuous display of puffy white blooms, ‘Chocolate’ attracts butterflies, bees, and other beneficial insects.
• This perennial is relatively tolerant of deer.

GARDEN ATTRIBUTES

• The foofy white flowers can make a nice addition to a cut flower arrangement. Although subtle, the blooms have a mildly pleasant fragrance about them.
• Versatile in sun or part shade locations including (but not limited to) cottage gardens, woodland gardens, borders, naturalized areas, native gardens, and/or pollinator gardens.
• This perennial is a very versatile addition to most gardens. It can thrive in both moist rich soils and dry rocky soils. Once established, this perennial is very drought tolerant.
• Although very shade tolerant, ‘Chocolate’ has the richest, darkest foliage color when grown in full sun.

NATIVITY

Found in Eastern and Central North America.

COMPANION PLANTS

Gaura, Geranium, Leucanthemum, Gaura, Lysimachia, Euphorbia, Stachys, Artemisia, Glechoma, Houttuynia, Ceratostigma

COMMON NAME(S)

Joe-Pye weed, snakeroot, boneset, thoroughworts

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