DIRECTIONS FOR USE ON ORNAMENTAL CROPS, CUT FLOWERS AND TURFGRASS

PRODUCT INFORMATION
ProGibb T&O is an extremely active plant growth regulator. Care must be used in measuring, diluting, and applying ProGibb T&O.

A foliar application of ProGibb T&O supplies plants with an additional source of the naturally occurring plant growth regulator gibberellin. Gibberellins are involved in numerous plant development processes. Adding gibberellic acid (GA) promotes a number of desirable effects in horticulture crops including increased flower size, increased flower number, uniform flowering, increased stem elongation, and a decrease in time to flower. Additionally, gibberellin applications have been shown to reduce the minimum temperature required to initiate plant growth and will overcome bud and seed dormancy. In Bermudagrass turf, adding ProGibb T&O will initiate and/or maintain growth and prevent color change during periods of cold stress and will maintain and/or enhance turf growth during summer months.

GENERAL INSTRUCTIONS
When applying plant growth regulators, deviations in rates, timings, or water volumes from the label directions have been known to result in undesirable effects.

For optimum effectiveness, thorough spray coverage must be achieved; only plant parts covered with spray solution will be affected. Plant parts not directly covered with ProGibb T&O will not respond to the application.

An effective dose of ProGibb T&O is strongly dependent on application volume. Variation in plant response is possible if a given rate is applied at different spray volumes. Uniformity of spray solution is equally important.

When applying foliar applications of ProGibb T&O spray plants to run-off. The actual spray application rate will vary depending on plant size and spacing density. A spray application rate which is effective for 3-inch potted plants spaced at a density of 1 pot per square foot is 2 quarts of finished spray solution per 100 square feet of bench area.

Differences in plant response to ProGibb T&O due to differences in plant surfaces, leaf orientation, and plant structure are possible. ProGibb T&O is most efficacious when applied during morning or late afternoon hours or when plants are not under environmental stress as extreme temperatures can influence plant responses to ProGibb T&O.

DETERMINING OPTIMAL APPLICATION RATES
The rates on this label are ranges and an optimum ProGibb T&O rate will depend on climatic conditions as well as physical and environmental factors. Specific growing practices such as watering, irrigation, lighting, temperature, and light conditions will affect plant responses to a given ProGibb T&O rate.

Results from ProGibb T&O applications are dependent upon timing, rate, frequency of application, and plant vigor at application. ProGibb T&O applications made under dry conditions (cool temperatures, low air movement and medium to high relative humidity) will increase absorption by the plant, thus optimizing effectiveness.

To determine optimum use rates, conduct trials on a small number of plants under actual use conditions using the lowest indicated rate. When a range of rates is indicated, use the lowest concentration directed until familiarity is gained.

LIMITATIONS
• For optimum effectiveness, thorough spray coverage must be achieved; all parts of the plant or crop must receive the spray or desired results will not occur.
• Do not apply to plants under pest, nutritional, or water stress. ProGibb T&O will not correct or substitute for treatment of pest, nutrient, or water stresses.
• Do not apply after flower buds show color.
• Do not apply through any type of irrigation system.
• Avoid drift onto non-target species.
• Do not mix ProGibb T&O with pesticides, fertilizers, wetting agents, spreader stickers or other adjuvants.
• Over-application has the potential to result in accelerated plant growth development.
• Do not apply ProGibb T&O to any food crop.
• Do not reuse soil from plants treated with ProGibb T&O.

MIXING INSTRUCTIONS AND RATE CONVERSION TABLE
Apply with standard spray equipment set according to manufacturer's indications.

ProGibb T&O mixes readily with water. For best results, have the water pH at 7.0 and always below 8.5.

Foliar Applications: Always make sure application equipment is thoroughly clean before mixing. When preparing ProGibb T&O for use as a foliar spray, fill tank to one half full. Add the amount of ProGibb T&O according to the rate conversion table below. Complete filling the tank. Dispose of any unused spray material at the end of each application following local, state or federal law.

Rate Conversion Table*

<table>
<thead>
<tr>
<th>ppm (parts per million)</th>
<th>Milliliters (mL) of ProGibb T&amp;O per liter of spray solution</th>
<th>Milliliters (mL) of ProGibb T&amp;O per gallon of spray solution</th>
<th>Fl. oz. of ProGibb T&amp;O per gallon of spray solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.03</td>
<td>0.1</td>
<td>0.003</td>
</tr>
<tr>
<td>3</td>
<td>0.15</td>
<td>0.5</td>
<td>0.02</td>
</tr>
<tr>
<td>10</td>
<td>0.3</td>
<td>1.1</td>
<td>0.04</td>
</tr>
<tr>
<td>25</td>
<td>0.74</td>
<td>2.8</td>
<td>0.29</td>
</tr>
<tr>
<td>50</td>
<td>1.5</td>
<td>5.6</td>
<td>0.19</td>
</tr>
<tr>
<td>100</td>
<td>3.0</td>
<td>11.3</td>
<td>0.42</td>
</tr>
<tr>
<td>250</td>
<td>7.4</td>
<td>28.0</td>
<td>0.56</td>
</tr>
<tr>
<td>500</td>
<td>14.8</td>
<td>56.0</td>
<td>1.9</td>
</tr>
<tr>
<td>750</td>
<td>22.2</td>
<td>84.0</td>
<td>2.6</td>
</tr>
<tr>
<td>1000</td>
<td>28.5</td>
<td>112.3</td>
<td>3.6</td>
</tr>
</tbody>
</table>

*ProGibb T&O is a liquid. Each fluid ounce contains approximately 1.6 grams of active ingredient.

ORNAMENTAL CROPS, CUT FLOWERS AND TURFGRASS
• The following use rates are based on results with common cultivars. Differences in responsiveness vary between cultivars, growing conditions, and cultural management systems. Therefore, prior to widespread usage, test a small number of plants from each cultivar under a specific set of growing and cultural management conditions to verify desired efficacy.
• ProGibb T&O is an extremely potent plant growth regulator. The general effects on horticulture crops are to increase plant size through increased stem elongation and leaf and petal expansion. Applied at an improper time, at excessive rates, or too frequently, plants have the potential to become long and spindly with weak stems.
### Spray Instructions for Ornamentals

#### Azalea

<table>
<thead>
<tr>
<th>Crop/ Variety</th>
<th>Objective/ Benefit</th>
<th>Rate (gpm a.i.)</th>
<th>Application Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azalea</td>
<td>As a partial replacement of cold treatment to break flower dormancy. Applications of ProLibb T&amp;O have been shown to partially replace a cold treatment needed to break flower dormancy of Azalea.</td>
<td>250-600</td>
<td>For three consecutive weeks after a single fogger application. Begin applications only after plants have received 15 to 20°C of chilling, have 80% bloom at Stage 5 of final development (i.e., node development one count) using leaflet count. A representative spray schedule consists of applications made at 1, 4, and 16 Days after last warm spell chilling. Flowering will be delayed if applied prior to Stage 5.</td>
</tr>
</tbody>
</table>

**Note:**
- Thorough spray coverage is essential for uniform flowering.
- Do not apply after flower bud is open.
- Cultivar such as 'Glenia', 'Pride', and 'Redding', a single spray of 1,000 ppm after 4 weeks of chilling have proven effective in breaking dormancy.

#### Calla Lily

<table>
<thead>
<tr>
<th>Crop/ Variety</th>
<th>Objective/ Benefit</th>
<th>Rate (gpm a.i.)</th>
<th>Application Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calla Lily</td>
<td>For increased flowering. Applications of ProLibb T&amp;O have been shown to increase the number of flowers per spike or flower in Calla Lilies.</td>
<td>500</td>
<td>Soil irrigate or till in ProLibb T&amp;O at 500 ppm for 10 minutes prior to planting.</td>
</tr>
</tbody>
</table>

**Note:**
- Some flower bud or flower branching has occasionally been seen on some cultivars. Reduce rates when this is noted. Changing soil time or concentration varies the response to ProLibb T&O.

#### Camellia

<table>
<thead>
<tr>
<th>Crop/ Variety</th>
<th>Objective/ Benefit</th>
<th>Rate (gpm a.i.)</th>
<th>Application Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camellia</td>
<td>For substitution of chilling requirements and to increase bloom size. Applications of ProLibb T&amp;O have been shown to substitute for the chilling requirements and increase bloom size of Camellia.</td>
<td>20% solution</td>
<td>Dilute ProLibb T&amp;O in half by mixing equal volumes of water and water. Remove the vegetative buds immediately adjacent to or below the final bud. Place single drop of prepared solution to the vegetative bud scar.</td>
</tr>
</tbody>
</table>

**Note:**
- The addition of a deposition aid (such as carboxy methyl cellulose) to thicken the solution will decrease run-off.

### Geranium

<table>
<thead>
<tr>
<th>Crop/ Variety</th>
<th>Objective/ Benefit</th>
<th>Rate (gpm a.i.)</th>
<th>Application Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geranium</td>
<td>For increase in flower number and flower size. Applications of ProLibb T&amp;O have been shown to increase flower number and flower size of Geranium cuttings.</td>
<td>10-750</td>
<td>Apply a single foliar application of ProLibb T&amp;O at 10-750 ppm beginning 2 to 3 weeks after each pinch. Continue applications on a weekly basis for 1 to 2 weeks after the first application.</td>
</tr>
</tbody>
</table>

**Note:**
- Treatments prior to interference showing color or concentrations higher than 5 ppm have occasionally caused pectine stretching.

#### Pompom Chrysanthemum

<table>
<thead>
<tr>
<th>Crop/ Variety</th>
<th>Objective/ Benefit</th>
<th>Rate (gpm a.i.)</th>
<th>Application Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pompom</td>
<td>For elongated pedicels. Applications of ProLibb T&amp;O have been shown to elongate pedicels of Pompom Chrysanthemum.</td>
<td>25-60</td>
<td>Apply a single foliar application of 25 to 60 ppm 4 to 5 weeks after initiation of short days. Apply directing the spray solution towards the flower buds.</td>
</tr>
</tbody>
</table>

**Note:**
- Over-application or incorrect timing have caused stretched, spindly and weak stems.

### Spiderphyllum and Other Araceae

<table>
<thead>
<tr>
<th>Crop/ Variety</th>
<th>Objective/ Benefit</th>
<th>Rate (gpm a.i.)</th>
<th>Application Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiderphyllum</td>
<td>To accelerate bloom and increase the number of flowers per plant. Applications of ProLibb T&amp;O have been shown to increase flowering of Spiderphyllum.</td>
<td>150-250</td>
<td>Apply a single foliar application of 150 to 250 ppm approximately 9 to 12 weeks prior to expected date of sale. Spray to the point of run-off and thoroughly wet all growing points.</td>
</tr>
</tbody>
</table>

**Note:**
- Some flower distortion or leaf stretching has been observed on cultivars such as 'Petite', 'Starlight', 'Sunstar', and 'Mauna Lani'. Reduce rates when this is noted. Othar cultivars include evaluate ProLibb T&O on a small number of plants prior to application of the product on a commercial basis.
APPLICATI ONS TO CUT FLOWERS
Apply ProGibb T&O to ornamental plants grown for cut flowers to promote stem elongation and flowering. Applying ProGibb T&O has the potential to dramatically promote flowering in many dicot and some monocot plants.

NOTE: ProGibb T&O is very active and application at an excessive rate results in undesirable effects. First evaluate ProGibb T&O on a small number of plants prior to application of the product on a widespread scale.

CUT FLOWERS

<table>
<thead>
<tr>
<th>CROP/ VARIETY</th>
<th>OBJECTIVE/ BENEFIT</th>
<th>RATE (ppm a.i.)</th>
<th>APPLICATION TIMING</th>
</tr>
</thead>
</table>
| ASTER
  - Cactus
  - Limns
  - Monte Carlo-Type
  - Baby-Type
| To promote stem elongation, and break dormancy. Applications of ProGibb T&O have been shown to increase stem elongation and reduce time to flowering. | 50-100 | Make 1-2 applications at 50-100 ppm during the early vegetative period. Apply when plants are 5-6” in height. Keep applications 2-3 weeks apart. |

BABY'S BREATH (Gypsophila)

<table>
<thead>
<tr>
<th>CROP/ VARIETY</th>
<th>OBJECTIVE/ BENEFIT</th>
<th>RATE (ppm a.i.)</th>
<th>APPLICATION TIMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gypsophila</td>
<td>To accelerate plant growth, increase number of flowering stems, increase flower number, and increase uniformity. Applications of ProGibb T&amp;O have been shown to promote uniform and increased flowering of Gypsophila.</td>
<td>50-100</td>
<td>Apply 3-4 applications at 50-100 ppm at 2-3 week intervals. Keep applications 2-3 weeks apart.</td>
</tr>
</tbody>
</table>

CUT FLOWERS (continued)

<table>
<thead>
<tr>
<th>CROP/ VARIETY</th>
<th>OBJECTIVE/ BENEFIT</th>
<th>RATE (ppm a.i.)</th>
<th>APPLICATION TIMING</th>
</tr>
</thead>
</table>
| LARKSPUR
  - Compact
  - Emu Blue
  - Oriental
  - Delphinium type
| To promote plant growth and stem elongation. Applications of ProGibb T&O have been shown to promote plant growth and stem elongation of Larkspur. | 50-100 | Apply as a foliar spray when plants are 4-5” in height. Keep applications 2-3 weeks apart. |

QUEEN'S ANNE'S LACE (Aruncus)

<table>
<thead>
<tr>
<th>CROP/ VARIETY</th>
<th>OBJECTIVE/ BENEFIT</th>
<th>RATE (ppm a.i.)</th>
<th>APPLICATION TIMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queen Anne's Lace</td>
<td>To promote plant growth and stem elongation. Applications of ProGibb T&amp;O have been shown to promote plant growth and stem elongation of Queen Anne's Lace.</td>
<td>50-100</td>
<td>Apply as a foliar spray when plants are 4-5” in height. Keep applications 2-3 weeks apart.</td>
</tr>
</tbody>
</table>

CUT FLOWERS (continued)

<table>
<thead>
<tr>
<th>CROP/ VARIETY</th>
<th>OBJECTIVE/ BENEFIT</th>
<th>RATE (ppm a.i.)</th>
<th>APPLICATION TIMING</th>
</tr>
</thead>
</table>
| STATICE (Limonium)
| To promote plant growth and stem elongation. Applications of ProGibb T&O have been shown to promote plant growth and stem elongation of Statice. | 50-100 |Apply as a foliar spray when plants are 4-5” in height. Keep applications 2-3 weeks apart. |

SWEET WILLIAM (Dianthus)

<table>
<thead>
<tr>
<th>CROP/ VARIETY</th>
<th>OBJECTIVE/ BENEFIT</th>
<th>RATE (ppm a.i.)</th>
<th>APPLICATION TIMING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweet William</td>
<td>To promote plant growth and stem elongation. Applications of ProGibb T&amp;O have been shown to promote plant growth and stem elongation of Sweet William.</td>
<td>50-100</td>
<td>Apply as a foliar spray when plants are 4-5” in height. Keep applications 2-3 weeks apart.</td>
</tr>
</tbody>
</table>
BEDDING PLANTS, ANNUAL AND PERENNIAL POTTED CROPS
(For example: Tea Form Amaryllis, Flowering Chrysanthemum, Polinetti), FIELD-GROWN ORNAMENTALS AND BULB CROPS

Application Information for Promotion of Plant Growth
Apply ProGibb T&O to bedding plants, annual and perennial potted crops, and bulb crops to promote plant growth. Applying ProGibb T&O has the potential to dramatically promote plant growth of most dicots and some monocots. Additionally, utilize a foliar ProGibb T&O application to overcome over-applications of a gibberellin-enhancing plant growth regulator.

- When applying ProGibb T&O to promote plant growth, start with 1 ppm unless previous experience warrants higher use rates.
- If desired plant results are not achieved, a reapplication or an increase in rate is often warranted.

NOTE: ProGibb T&O is very active and application at an excessive rate results in undesirable plant elongation. Final evaluations ProGibb T&O on a small number of plants before application of the product on a widespread basis.

<table>
<thead>
<tr>
<th>RATE (ppm)</th>
<th>TIMING</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 5</td>
<td>Apply a single application directly to plant foliage.</td>
<td>Foliar application</td>
</tr>
</tbody>
</table>

APPLICATIONS TO TURFGRASS
Foliar applications of ProGibb T&O have been shown to initiate or maintain growth and prevent color change during periods of cold stress on Bermudagrass grown in golf courses, parks, and turf farms.

<table>
<thead>
<tr>
<th>CROP/ VARIETY</th>
<th>OBJECTIVE/BENEFIT</th>
<th>RATE (grams a.i./acre)</th>
<th>APPLICATION TIMINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bermudagrass</td>
<td>To initiate or maintain growth and prevent color change during periods of cold stress and light frosts.</td>
<td>0.5-5</td>
<td>Apply 10 grams a.i. weekly or 25 grams a.i. biweekly in 20- to 100-gallon applications.</td>
</tr>
</tbody>
</table>

Note:
- Maintain adequate moisture and proper fertilization programs as required for the local area.
- Keep applications of the high rate at least two weeks apart.
- Do not use on dormant turf.
- Discontinue treatments if thinning is observed. More frequent spraying is occasionally necessary.

Warm Weather Application
Bermudagrass (Fescue, Bluegrass, and other cultivars) To maintain or enhance growth of turf during summer months.

1-3
Apply 1 to 3 grams a.i. weekly in 20 to 100 gallons of water.

Note:
- Maintain adequate moisture and proper fertilization programs as required for your local area.
- Keep applications of the high rate at least two weeks apart.
- Do not use on dormant turf.
- Discontinue treatments if thinning is observed. More frequent spraying is occasionally necessary.

NOTICE TO USER
To the extent permitted by applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of the product other than as indicated on the label. User assumes all risk of use, storage or handling not in strict accordance with accompanying directions.

For additional information, call:
1-800-99-VALENT
(Professional Products)
www.valent.com
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Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, IL 60048 U.S.A.
Distributed by
Valent U.S.A. Corporation
P.O. Box 8125
Walnut Creek, CA 94596-0125
U.S.A.

Active Ingredients:
Gibberellic Acid... 4.5% w/w
Other Ingredients... 95.5% w/w
ProGibb T&O liquid contains approximately 0.9 grams active ingredient per fluid ounce or formulated product.

Distributed by:
Valent U.S.A. Corporation
P.O. Box 8125
Walnut Creek, CA 94596-0125
Made in U.S.A.

KEEP OUT OF REACH OF CHILDREN
WARNING - AVISO
To prevent inhalation of fumes from a vapor. Do not inhale any portion of this product. Do not contaminate water, aquatic or soil environments.

For MEDICAL and TRANSPORT Emergencies ONLY Call 24 Hours a Day 1-800-99-VALENT.
For All Other Information Call 1-800-99-VALENT.

NET CONTENTS
1 Quart (946 ml)

This container will treat 1.28 acres at the maximum use rate, as indicated for use on Bermudagrass turf.
ProGibb® T&O
PLANT GROWTH REGULATOR (PGR) SOLUTION

For use on turf and ornamental crops.

Active Ingredient:
ChloroethylAcetate........ 4.3% v/w
Other Ingredients......... 95.7% v/w

For use on turf and ornamental crops. See label for additional precautionary statements.

KEEP OUT OF REACH OF CHILDREN
WARNING – AVISO
Si cae a la redención de los niños, llévese al niño a un médico inmediatamente.

For MEDICAL and TRANSPORT Emergencies ONLY Call 24 Hours a Day 1-800-932-2600.

For All Other Emergencies 1-800-99-VALENT.

For additional information, call 1-800-99-VALENT.

Registered and Manufactured by: EPA Reg. No. 32115-IA-001
Valent BioScience Corporation EPA Reg. No. 73141-16
935 Technology Dr., Suite 100 Libertyville, IL 60048 U.S.A.
List No. 23005-01-09

Lot No. 04-5001-R4

1 Quart (946 ml)

This container will treat 326 acres at the maximum use rate, as indicated for use on Bermudagrass turf.