Proliant™

PLANT GROWTH REGULATOR
WATER SOLUBLE GRANULE

FOR ORGANIC PRODUCTION

ACTIVE INGREDIENT:

Gibberellin A_3	40.0% ww
Other Ingredients	60.0% ww
TOTAL	100%

Contains a total of 1 g of Gibberellic Acid in 2.5 g of product.

EPA Reg. No. 73049-1
EPA Est. No. 33762-IA-001 List No. A560218

INDEX:

KEEP OUT OF REACH OF CHILDREN
CAUTION

1.0 FIRST AID

If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-877-696-4204.

2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards To Humans & Domestic Animals

Caution: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

2.2 Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

2.3 User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then, wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

2.4 Environmental Hazards

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning or disposing of equipment washwaters or rinsate.

3.0 DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State/Tribal agency responsible for pesticide regulation.

CONTINUED

4.0 AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements in this labeling about Personal Protective Equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours *unless wearing appropriate PPE*.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

5.0 GENERAL INFORMATION FOR USE

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. Keep out of reach of children.

6.0 GENERAL APPLICATION INSTRUCTIONS

- Proliant Plant Growth Regulator Water Soluble Granule (hereafter referred to as *Proliant*) contains gibberellic acid which is an extremely potent plant growth regulator; when applying plant growth regulators, deviations from the label directions in the rates, timings, water volumes, or the adoption of untested spray mixes, results in undesirable effects. Always consult the local Valent representative or crop specialist in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- When a range of rates is indicated, use the concentration and spray volume indicated locally by the local Valent representative or crop specialist.
- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Use of a non-ionic surfactant has been shown to increase wetting and uptake of the active ingredient. Discard any unused spray material at the end of each day following local, state or federal law.
- For most efficacious results, use water with a pH of 4.0 - 8.5. Use buffer for water with pH above or below this range.
- Applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption of the active ingredient by the plant, thus optimizing effectiveness. Night-time applications are encouraged when day-time conditions are not conducive to slow drying conditions.
- Rainfastness: Re-apply if significant rain occurs within 2 hours of application.
- Avoid drift or accidental application to other crops.

7.0 COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

- When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.
- Start with a clear glass or plastic quart jar. Add water from the same water source that will be used for the larger tank mix. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Heat, separation, gelling, are all signs of incompatibility. Before using any mixes that pass the jar tests for compatibility, it is imperative to test the mixture on a designated area as it may result either in phytotoxicity or ineffectiveness. For further information, consult your local Valent representative.
- For aerial applications spray volumes must be greater than 2 gallons per acre (10 gallons per acre for tree crops).
- No preharvest interval is required for this product.
- Entry into treated areas is allowed after the restricted entry interval (REI) of 4 hours; before this time, entry is prohibited, unless wearing appropriate PPE (coveralls, waterproof gloves, shoes plus socks).

8.0 STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Keep containers tightly closed when not in use.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill container 1/4 full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

SPRAY GUIDELINES

Apply in sprays of sufficient water volumes to ensure thorough wetting. Tank-mixing with surfactants, fertilizers, and/or other pesticides should not be done unless compatibility and phytotoxicity testing is done first using appropriate methods.

DIRECTIONS FOR CHEMIGATION

Fill the supply tank with the desired amount of water and begin agitation. Agitation should be maintained throughout the mixing and application process. Add the required amount of *Proliant* to supply tank in order to achieve the final solution rate recommended for the specific crop to be treated. *Proliant* should be applied at the end of water application (prior to last complete cycle in moving systems).

CHEMIGATION PRECAUTIONS

Apply this product only through the following systems: center pivot, lateral move, side/wheel roll, traveler, solid set, big gun or hand move which have overhead sprinklers. Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from nonuniform distribution of treated water. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Prior to application ensure that the chemigation system meets the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

In addition to the above use rates and recommendations, the following precautions must be observed when using this product in any type of irrigation system.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

PASTURES & FORAGE – FIELD USES

CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Perennial Forage Grasses	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 g a.i. 7.5 - 27.5 g product 0.3 - 1.0 oz product	Spring Application: 1 - 3 applications every 3 - 4 weeks starting at green up after 1 - 2 inches of new shoot growth has emerged. Autumn Application: 1 - 3 applications every 3 - 4 weeks starting when forage growth has slowed due to cool temperatures. Best response occurs when average daily temperatures are between 40° F - 60° F and adequate moisture and nutrition are present.
Annual Forage Grasses	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 g a.i. 7.5 - 27.5 g product 0.3 - 1.0 oz product	Apply 1 - 6 applications every 3 - 4 weeks from autumn to early spring during periods of suboptimal growth due to cool temperatures. If applying to over-seeded pasture or newly established pasture, apply only after seedlings are well established. Best response occurs when average daily temperatures are between 40° F - 60° F and adequate moisture and nutrition are present.
Timothy Hay	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	0.3 - 1.0 oz product	Spring Application: apply when forage growth is slow due to cool temperatures. After Cutting: Apply 7 - 14 days after cutting to promote growth.

PASTURES & FORAGE – FIELD USES (Continued)

CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Cereal Grains (such as barley, oats, rye, sorghum, wheat, triticale)	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 g a.i. 7.5 - 27.5 g product 0.3 - 1.0 oz product	Spring Application: 1 - 3 applications every 3 - 4 weeks starting at green up after 1 - 2 inches of new shoot growth has emerged. Autumn Application: 1 - 3 applications every 3 - 4 weeks starting when forage growth has slowed due to cool temperatures. Application to cereal grains during stem elongation (jointing onwards) can result in lodging. Apply during early tillering growth stages prior to stem elongation to avoid lodging. Best response occurs when average daily temperatures are between 40° F - 60° F and adequate moisture and nutrition are present.
Winter Brassicas (such as turnip, kale, rape)	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 g a.i. 7.5 - 27.5 g product 0.3 - 1.0 oz product	Spring Application: 1 - 3 applications every 3 - 4 weeks starting at green up after 1 - 2 inches of new shoot growth has emerged. Autumn Application: 1 - 3 applications every 3 - 4 weeks starting when forage growth has slowed due to cool temperatures. Best response occurs when average daily temperatures are between 40° F - 60° F and adequate moisture and nutrition are present.

NOTE:
- Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following application. For best results, ensure fertility is adequate to sustain additional pasture growth.
- Do not tank-mix *Proliant* with any Growth Regulators/Synthetic Auxins (Group 4) herbicides.
- *Proliant* enhances the effect of some HPPD (Group 27) herbicides and will cause unwanted injury when applied post-emergent to crops and hybrids with known sensitivity to HPPD herbicides. Users should understand and accept this risk before applying *Proliant* in combination with HPPD herbicides.
- Plants will not respond to treatment without adequate moisture or if under pest and/or nutritional stress.
- Once plants are at their maximum growth rate under optimal temperatures application of *Proliant* will not stimulate additional growth.
- Plants will not respond when the ground is frozen.
- Plants treated at maximum physiological size will not respond with additional growth.

COVER CROPS – FIELD USES

CROP	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Annual Grasses (such as barley, oats, rye) Annual Broadleaves and Legumes (such as vetch, clover, cowpea, radish)	To stimulate root growth and dry matter production, reducing erosion and improving soil quality.	0.3 - 1.0 oz product	Apply 1 - 3 applications every 3 - 4 weeks starting after the primary crop is harvested, when 1 - 2 inches of shoot growth in the cover crop has emerged.

FIELD USES

CROP	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Corn: Field, Silage	To increase yield and help overcome the effects of heat or drought.	2 - 6 g a.i. 5 - 15 g product 0.3 - 0.6 oz product	Apply at V2 - V6
Corn: Popcorn, Sweet corn, Seed corn	To increase yield and help overcome the effects of heat or drought.	2 - 6 g a.i. 5 - 15 g product 0.3 - 0.6 oz product	Apply at V2 - V6

NOTE:
- Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following application. For best results, ensure fertility is adequate to sustain additional plant growth.
- Plants will not respond to treatment without adequate moisture or if under pest and/or nutritional stress.
- Better results have been seen with the use of a non-ionic surfactant.
- *Proliant* is compatible as a tank-mix partner with Roundup® herbicide on glyphosate resistant corn. Use of *Proliant* with other tank-mix partners is done solely at the user's risk.
- Always consider tank-mix partner recommendations when using *Proliant*.
- Do not tank-mix *Proliant* with any Growth Regulators/Synthetic Auxins (Group 4) herbicides.
- *Proliant* enhances the effect of some HPPD (Group 27) herbicides and will cause unwanted injury when applied post-emergent to crops and hybrids with known sensitivity to HPPD herbicides. Users should understand and accept this risk before applying *Proliant* in combination with HPPD herbicides.

COVER CROPS – FIELD USES (Continued)

CROP	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Sugarcane (Not for use in California)	To maintain yields in older plantings, increase bio-mass and stimulate growth before harvest of cane in older production fields (>3 years).	1.0 - 2.0 g a.i. 2.5 - 5 g product 0.1 - 0.2 oz product	Apply at 1st to 5th internode stage to new plantings or ratoon crop in at least 20 gal/A. Addition of non-ionic surfactant may increase activity.

9.0 WARRANTY AND DISCLAIMER STATEMENT

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

Registered by:
Valent BioSciences LLC
1910 Innovation Way, Suite 100
Libertyville, IL 60048, U.S.A.
1-877-696-4204

44-1041/R1 (Pkg. A50410758/R1 D)