

QUANTA™

SYSTEMIC /PGR & FUNGICIDE

FOR THE CONTROL OF DISEASES SUCH AS: DOWNEY MILDEW, PHYTOPHTHORA AND PYTHIUM IN ORNAMENTALS AND BEDDING PLANTS, ROSES, PHYTOPHTHORA IN CONIFERS, PYTHIUM IN TURF, AND PHYTOPHTHORA AND PYTHIUM DISEASES ASSOCIATED WITH STEM AND CANCKER BLIGHT.

ACTIVE INGREDIENTS:

Mono-and di-potassium salts of Phosphorus Acid* 56.00%
Indole -3-butyric Acid 0.0139%

OTHER INGREDIENTS: 43.9861.0%

TOTAL: 100.0%

*Contains 6.87 lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorus Acid.

Equivalent to 5.67 lbs Phosphorus Acid/gallon

KEEP OUT OF REACH OF CHILDREN CAUTION
PRECAUTIONARY STATEMENTS Hazards to Humans & Domestic Animals CAUTION
Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing vapors or spray mist. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.
FIRST AID
IF SWALLOWED: <ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything to an unconscious person.
IF ON EYES: <ul style="list-style-type: none">• 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.• Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING: <ul style="list-style-type: none">• 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.
IF INHALED: <ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.
SEE INSIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG. NO. 5905-566
AD 090310

EPA EST. NO. 44689-TX-001
NET CONTENTS: 2.5 Gallons (9.46 L)

MANUFACTURED BY
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300
COLLIERVILLE, TN 38017

Disclaimer: Always refer to the label on the product before using Helena or any other product.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt and long pants, shoes plus socks, protective eyewear, and waterproof gloves.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry. When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should 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.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

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 agency responsible for pesticide regulations.

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 on this label about personal protective equipment (PPE) and restricted-entry interval (REI). 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 workers entry into treated areas during the restricted entry interval of 4 hours.

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:

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

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of treated areas until sprays have dried.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

Pesticide Storage: Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or hazardous waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available.

NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available.

REFILLABLE CONTAINER: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

In the event of a major spill, fire or other emergency, call 800-424-9300 day or night.

APPLICATION THROUGH SPRINKLER IRRIGATION SYSTEMS

Use of **QUANTA™** through chemigation is not permitted in California.

Apply this product through drip, microjet, solid set and center pivot sprinkler irrigation systems. Do not apply this product through any other type of irrigation system.

PREPARATION OF INJECTION EQUIPMENT: Remove pesticide, scale residues and other foreign matter from the chemical tank and entire injection system. Flush with clean water.

APPLICATION INSTRUCTIONS: Fill tank with one half to three quarters the desired amount of water. Start hydraulic or mechanical agitation. Add the required amount of **QUANTA™** then the remaining volume of water. Set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the solution of **QUANTA™** into the irrigation water line so as to deliver the rate per acre. Inject the **QUANTA™** solution with a positive displacement pump into the main line before a right angle turn to ensure adequate mixing. For other questions about calibration, contact equipment manufacturers, State Extension Service specialists or other experts.

NOTE: For Microjet and Drip Irrigation Systems: After treatment with **QUANTA™** has been completed, avoid further irrigation of the treated area for 24 hours to 48 hours.

For Solid Set and Center Pivot Irrigation Systems: After treatment with **QUANTA™** has been completed, avoid further irrigation of the treated area until foliage is dry to prevent washing the chemical off the crop.

GENERAL PRECAUTIONS FOR APPLICATION THROUGH SPRINKLER IRRIGATION SYSTEMS

If you have any questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

Maintain continuous agitation in mix tank during mixing and application to assure solution uniformly. The irrigation 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 towards 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

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withdrawn from the supply tank when 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.

Do not apply when wind speed favors drift, when system connection or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of chemigation water.

Allow sufficient time for pesticide to be flushed through all lines and nozzles before turning off irrigation water. A person knowledgeable in chemigation system and responsible for its operation shall shut down and adjust the system as needed.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.

GENERAL APPLICATION INSTRUCTIONS

QUANTA™ may be applied by various application methods, including foliar spray, soil drench, soil incorporation and bare root dip. For foliar sprays, apply **QUANTA™** with sufficient water volumes for adequate coverage of foliage, according to crop and growth stage. To ensure good coverage, spray to wetness, but avoid run-off.

MIXING INSTRUCTIONS

1. Fill the spray tank with $\frac{1}{4}$ - $\frac{1}{2}$ of the volume of water required before adding **QUANTA™**.
2. Add **QUANTA™** slowly to the tank and agitate by mechanical or hydraulic means.
3. Continue agitating as tank fills with water to the desired volume.
4. Maintain agitation during application.

COMPATIBILITY

QUANTA™ is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of **QUANTA™** with some foliar fertilizers and copper products may not be compatible or may cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity).

Due to **QUANTA™** acidic nature, the use of acidifying-type compatibility agents are not recommended. If spray adjuvants are used they must be tested before use to confirm compatibility with **QUANTA™**.

A jar test should be used to confirm compatibility with **QUANTA™** in a clean jar using the same water source that is normally used to fill spray tank, add the same proportions of each product and the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or can be remixed readily the tank mix is compatible. The solution that resulted from the above compatibility test should be sprayed onto a few plants and inspected for visual effects of phytotoxicity (leaf burn) 3 to 7 days later.

CARRIERS AND DILUENTS

CORON® (Controlled Released Nitrogen) products can be used as a sole carrier or diluent for **QUANTA™** applications. General use rate would be 3 to 6 ounces of **CORON®** per 1,000 sq. ft. Use rate of specific **CORON®** products may be dictated by local use patterns and /or historical findings.

ORNAMENTAL APPLICATIONS*

QUANTA™ may be used for effective control of Bacterial blight, Downy mildew, Phytophthora and Pythium diseases of Ornamental grown in commercial landscapes, commercial nurseries, golf courses, parks, and greenhouses.

QUANTA™ may be applied to plants such as Aglaonema, Anthurium, Aphelandra, Arborvitae, Azaleas, Bougainvillea, Boxwood, Cattelya skinneri, Ceanothus, Cotoneaster, Cissus, Diffenbachia, Dogwood, English ivy, Ficus, Hibiscus, Juniper, Japanese Holly, Leather leaf Fern, Monterey Pine, Peperomia, Photinia, Pittosporum, Philodendron, Pieris, Pothos, Rhododendron, Roses, Schefflera, Sedum, Sempervivum, Syngonium, Spathiphyllum, Taxus media, White Pine, White Cedar, and Zygocactus.

Applications should occur before disease development and in conjunction with good cultural management practices. Use higher rate of application when disease pressure is severe. Do not exceed recommended application rates or apply more frequently than stated on label or plant injury may occur. Do not apply to plants

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that are heat or moisture stressed. Do not apply to plants that are in a state of dormancy. Do not exceed recommended spray intervals or label rates as plant injury can occur.

Disease	Application Method	Rate	Application Program
Bacterial blight (<i>Xanthomonas Campestris</i>) posthovars: <i>Dieffenbachiae, ficif</i> <i>Hederae and syngonli</i>	Foliar spray	1.2 to 2.5 pints per 100 gallons of water OR .25 to .4 fl oz per gallon of water	Apply spray to thoroughly wet all foliage. Application intervals: 7 to 14 days. Repeat as required.
Downy mildew	Foliar spray	1.5 – 3 pints per 100 gallons of water OR .25 to .50 fl. oz. per gallon of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
<i>Phytophthora</i> and <i>Pythium</i>	Foliar spray	1.25- 2.5 pints per 100 gallons of water OR 1/3 to 2/3 fl. Oz. per gallon of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
	Soil drench	3.75 to 7.6fl. oz. per 100 gallons of water	Apply each 25 gallons of solution to an area of 100 square feet. Follow application with irrigation. Repeat as required. Limit of one application per month.
	Soil Incorporation	.75-1.2 pints per cubic yard of soil	Just prior to potting, mix 1 to 2 pts. of QUANTA™ into each cubic yard of growing media. If disease pressure is high, foliar spray or soil drench may be needed.
	Bare rooted dipping of transplants	1.2 pints per 100 gallons of water OR .25 fl. Oz. per gallon	Immediately before transplanting, dip transplants for two minutes, keep roots submerged, ensure root mass is thoroughly wet.

*Not for use in California.

BEDDING PLANTS*

QUANTA™ may be used for effective control of Downy mildew, Phytophthora and Pythium diseases of BEDDING PLANTS grown in commercial landscapes, commercial nurseries and golf courses, parks, and greenhouses. QUANTA™ may be applied to plants such as Ageratum, Algerian Ivy, Anthurium, Artemesia, Aster, Begonia, Baby's Breath, Caladium, Carnation, Chrysanthemum, Columbine, Coleus, Daisy, Delphinium, Easter Lily, English ivy, Foxglove, Gallardia, Geranium, Gloxinia, Impatiens, Marigold, Petunia, Pansy, Phlox, Pinks, Poinsettia, Primrose, Prostrate Rosemary, Salvia, Snapdragon, Vinca, Verbena, and Zinnia.

Applications should occur before disease development and in conjunction with good cultural management practices. Use higher rate of application when disease pressure is severe. Do not exceed recommended application rates or apply more frequently than stated on label or plant injury may occur. Do not apply to plants that are heat or moisture stressed.

Disease	Application Method	Rate	Application Program
Downy mildew	Foliar spray	1.5 – 2.75 quarts per 100 gallons of water OR 1/4 to .75 fl. oz. per gallon of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
<i>Phytophthora</i> and <i>Pythium</i>	Foliar spray	1.25- 2.5 pints per 100 gallons of water OR .25 to .50 fl. Oz. per gallon of water	Application intervals: 14 to 21 days. Repeat as required. Note: Do not apply more than 500 gallons of spray solution per acre.
	Soil drench	4.0 to 7.5 fl. Oz. per 100	Apply each 25 of gallons of

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		gallons of water	solution to an area of 100 square feet. Follow application with irrigation. Repeat as required. Limit of one application per month.
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CONIFERS IN COMMERCIAL NURSERIES, PLANTATIONS AND FORESTS* (INCLUDING CHRISTMAS TREES)

QUANTA™ applications in conjunction with good cultural management practices may be used for effective control of root rot (*Phytophthora*) in CONIFERS including, but not limited to, Pines, Spruce and Douglas Fir. Use higher rate of application when disease pressure is severe. Do not exceed recommended application rates or apply more frequently than stated on label or plant injury may occur. Do not apply to CONIFERS that are moisture or heat stressed.

Disease	Application Method	Rate	Application Program
<i>Phytophthora</i>	Foliar spray	1.25- 2.5 pints per 100 gallons of water OR 1/4 to 1/2 fl. Oz. per gallon of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
	Soil drench	1.25- 2.5 pints per 100 gallons of water OR 1/4 to 1/2 fl. Oz. per gallon of water	Apply 1 gallon of solution per square yard. Follow application with irrigation. Application intervals: 14 to 21 days. Repeat as required.
	Bare root dipping at transplanting	1 quart per 100 gallons OR 1/4 fl. oz. per gallon	Immediately before transplanting, dip transplants for two minutes; keep roots submerged and ensure root mass is thoroughly wet.

*Not for use in California.

Do not graze livestock in treated areas of conifer nurseries or plantations. Do not feed forage from treated areas of plantations and or nurseries.

ORNAMENTAL PEAR IN COMMERCIAL NURSERIES, PLANTATIONS*

QUANTA™ applications in conjunction with good cultural management practices may be used for effective control of fire blight in ornamental pear, hawthorne, and pyracantha. Use higher rate of application when disease pressure is severe. Do not exceed recommended application rates or apply more frequently than stated on label or plant injury may occur. Do not apply to ROSES that are moisture or heat stressed.

Disease	Application Method	Rate	Application Program
Fire blight	Foliar spray	1.5 pints per 100 gallons	First application pre- bloom. Application intervals: 7days until end of bloom period. Apply spray to thoroughly wet all foliage.

*Not for use in California.

ROSES IN COMMERCIAL NURSERIES, PLANTATIONS*

QUANTA™ applications in conjunction with good cultural management practices may be used for effective control of downy mildew (*Peronospora sparsa*) in ROSES including, but not limited to, container, field, landscape and mini varieties. Use higher rate of application when disease pressure is severe. Do not exceed recommended application rates or apply more frequently than stated on label or plant injury may occur. Do not apply to ROSES that are moisture or heat stressed.

Disease	Application Method	Rate	Application Program
Downy mildew (<i>Peronospora sparsa</i>)	Foliar spray	1.5 pints per 100 gallons of water OR 1/4 fl. oz. per gallon of water	Apply spray to thoroughly wet all foliage. Application intervals: 7 to 14 days. Repeat as required.

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TURF*

QUANTA™ may be used for effective control of *Pythium* and damping-off diseases of turf grasses on Golf courses, parks, commercial landscapes, commercial turf production, and sod farms. When conditions favor disease, begin preventative applications and repeat at recommended intervals. Use higher rate of application when disease pressure is severe.

Disease	Application Method	Rate	Application Program
<i>Pythium</i>	Foliar spray	1.5 to 3.0 fl. oz. per 1,000 square feet	Apply recommended quantity of product in 1 to 5 gallon of water per 1,000 square feet. Ensure foliage is thoroughly wet. Application intervals: 14 to 21 days. Repeat as required. Do not irrigate or mow treated areas until spray has completely dried.

*Not for use in California.

TURF TANK MIXTURES*

For the effective control of summer stress complex caused by a complex of *Rhizoctonia* and *Pythium* diseases, **QUANTA™** should be tank mixed with **Fore® WP** fungicide and applied to turfgrasses on golf courses, parks, commercial landscapes, commercial turf production, and sod farms.

Disease	Application Method	Rate	Application Program
QUANTA™ + FORE® WP**	Summer Stress Complex(<i>Rhizoctonia</i> and <i>Pythium spp.</i>)	1.5 to 3.0 fl. oz QUANTA™ + 4 to 8 fl. oz. FORE® WP	Apply recommended quantity of product in 1 to 5 gallons of water per 1,000 square feet as a foliar spray. Start as a preventative spray at two-week intervals and repeat as required. Do not irrigate or mow treated areas until spray has completely dried.

CONDITIONS OF SALE-LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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