

Product Name: Quali-Pro Marvel-ous Plant Growth Regulator
APVMA Approval No: 93508/139402



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| Label Name: | Quali-Pro Marvel-ous Plant Growth Regulator |
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| Signal Headings: | CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING |
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| Constituent Statements: | ACTIVE INGREDIENT: 625 g/L TRINEXAPAC-ETHYL |
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| Mode of Action: | |
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| Statement of Claims: | For the reduction of leaf and stem growth of grass species and as an aid in turf management, as per the Directions for Use. |
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| Net Contents: | 200 mL to 1000 L |
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| Restrains: | <p>RESTRAINTS DO NOT apply to turf recovering from wear, renovation or turf affected by disease, waterlogging or other stresses. DO NOT use where growth regulatory effects are likely following the application of a fungicide or any other material. DO NOT apply to turf going into or coming out of dormancy. DO NOT apply if rainfall is expected within 1 hour, and DO NOT irrigate turf for at least 1 hour after application. DO NOT apply to Kentucky Bluegrass as damage may occur.</p> <p>SPRAY DRIFT RESTRAINTS Specific definitions for terms used in this section of the label can be found at www.apvma.gov.au/spraydrift DO NOT allow bystanders to come into contact with the spray cloud. DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas.</p> |
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| | <p>DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application.</p> <p>DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings one to two hours before sunset and persist until one to two hours after sunrise.</p> |
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| Directions for Use: | This section contains file attachment. |
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| Other Limitations: | |
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| Withholding Periods: | <p>WITHHOLDING PERIODS</p> <p>DO NOT GRAZE TREATED TURF/LAWN, OR FEED TURF/LAWN CLIPPINGS FROM ANY TREATED AREA TO POULTRY OR LIVESTOCK</p> |
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| Trade Advice: | |
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| General Instructions: | <p>GENERAL INSTRUCTIONS</p> <p>QUALI-PRO® MARVEL-OUS should be applied to actively growing turf, at least 6 hours before or after mowing. Good mowing management leading up to application is required to achieve a good quality turf surface and to obtain the best results from QUALI-PRO® MARVEL-OUS.</p> <p>Growth Regulation</p> <p>The recommended use rates are designed to give approximately a 20 to 50% reduction in clippings over a 2 to 6 week period. Full growth regulation by QUALI-PRO® MARVEL-OUS begins about 3 to 5 days after application. In practice the amount of growth regulation achieved will vary between situations due to environmental conditions and management practices. To some extent, therefore, application rates will need to be adjusted to match growing conditions, management practices and the amount of growth regulation required by the turf manager.</p> <p>Repeat applications can be made as soon as turf resumes growth or more suppression is required. Areas treated with QUALI-PRO® MARVEL-OUS should continue to receive regular maintenance practices, including irrigation, fertilization, and weed, disease and insect control when necessary, as recommended for quality turf.</p> <p>Winter Grass (Poa annua) Management</p> <p>Different grasses vary in their sensitivity to QUALI-PRO® MARVEL-OUS. Since Poa annua is more sensitive to QUALI-PRO® MARVEL-OUS than Bent Grass, QUALI-PRO® MARVEL-OUS can be used to reduce the competitiveness of Poa annua in Bent Grass golf greens.</p> <p>QUALI-PRO® MARVEL-OUS can be integrated into existing Poa annua control programs. Low rates of QUALI-PRO® MARVEL-OUS (that provide growth suppression of Poa annua, but not Bent Grass) applied during peak growth periods may enable a slow transition in the golf green sward composition away from Poa annua and towards a higher percentage of Bent Grass.</p> <p>Bahia Grass (Paspalum notatum) Management</p> <p>Different grasses vary in their sensitivity to QUALI-PRO® MARVEL-OUS and Quali-Pro® Negate®. Bahia Grass is very sensitive to the combination resulting in control of seedheads as well as vegetative growth suppression. Apply the combination as soon as seedheads</p> |
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start to form or when it becomes a regular mowing intervention issue, normally during October to January. Apply at 4 week intervals after mowing.

Couch Overseeding

An application of QUALI-PRO® MARVEL-OUS to couch will enhance the establishment of cool season turf grasses. QUALI-PRO® MARVEL-OUS has foliar uptake, so germination and seedling growth is not affected. Apply QUALI-PRO® MARVEL-OUS before verticutting, scalping, spiking or other similar operations to the couch. Apply QUALI-PRO® MARVEL-OUS 1 to 5 days before seeding.

MIXING

QUALI-PRO® MARVEL-OUS is an emulsifiable concentrate (EC) with minimal odour as the product does not contain petroleum solvents. QUALI-PRO® MARVEL-OUS mixes completely with water and may be tank mixed with many commonly used fungicides and liquid fertilizers. Add the required quantity of QUALI-PRO® MARVEL-OUS directly to a spray tank containing 2/3 of the required spray volume. Add the rest of the water and ensure the mix is thoroughly agitated before application.

QUALI-PRO® MARVEL-OUS can be tank mixed with some formulations of azoxystrobin, chlorothalonil and propiconazole fungicides and trifloxysulfuron sodium herbicide.

APPLICATION

Ensure even application in order to achieve even growth reduction. Avoid overlapping sprays.

Application Volume: Apply in 100 to 500 L/ha water, using suitable flat fan nozzles. Application volume should be adequate to ensure thorough and even coverage of the turf leaves and penetration to the crowns. In higher cut turf (≥ 15 mm) a significant spray shielding effect can occur, impacting negatively on spray penetration and even coverage at low application volumes.

Knapsack: It is important to apply the correct quantity of QUALI-PRO® MARVEL-OUS to a known area of turf. Apply between 2 and 10 L water/100 m² turf. Preferably use flat fan nozzles and ensure even coverage is achieved.

Golf Courses and Bowling Greens: Ensure product placement as uniformly as possible onto leaves and into crowns. Ideal application volume should be 350 to 500 L/ha. For best results use medium [XR Teejet* (11004 or 11005)] to coarse [Turbo Teejet* or AIXR Teejet* (11004 or 11005)] nozzles, at 5 km/h and 3 bar pressure. Boom height should not exceed 50 cm above the ground.

All Other Turf Areas: Ensure product placement as uniformly as possible onto leaves and into crowns. Ideal application volume should be 200 to 500 L/ha. For best results use medium [XR Teejet (11004 to 11008)] to coarse [Turbo Teejet or AIXR Teejet (11004 or 11005)] nozzles, at 8 km/h and 3 bar pressure. Boom height should not exceed 50 cm above the ground.

Bahia Grass Suppression and Seedhead Control: Ensure product placement as uniformly as possible onto leaves and into crowns. Ideal application volume should be 200 to 500 L/ha. For best results use coarse [Turbo Teejet* or AIXR Teejet* (11004 or 11005)] nozzles, at 8 km/h and 3 bar pressure. Boom height should not exceed 50 cm above the ground.
Non-ionic Surfactants: For Bahia Grass suppression and seedhead control when tank mixing with Quali-Pro® Negate®, use surfactants like BS1000 (1000 g ai/L formulations) at 0.25% v/v or 250 mL/100 L spray mix.

Application Near and Around Monuments and Hardscape Materials:

QUALI-PRO® MARVEL-OUS, at normal dilution rates, will not stain brass, bronze, concrete, granite, marble or other types of stone. Before using QUALI-PRO® MARVEL-OUS around other materials, test on a small-scale basis first.

Resistance Warning:

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| Precautions: | <p>Re-entry</p> <p>General public: DO NOT allow entry into treated areas until the spray has dried.</p> <p>Occupational users: DO NOT enter treated areas until the spray has dried, unless wearing cotton overalls buttoned to the neck and wrist (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.</p> |
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| Protections: | <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT</p> <ul style="list-style-type: none"> • Toxic to aquatic life. • DO NOT contaminate wetlands or watercourses with this product or used containers. • Wash out spraying equipment and mixing and measuring utensils with water onto grass. |
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| Storage and Disposal: | <p>STORAGE AND DISPOSAL</p> <p>Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site.</p> <p>Recyclable containers - This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible.</p> <p>Triple-rinse container for disposal. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced but may be taken separately.</p> <p>If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.</p> |
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| Safety Directions: | <p>May irritate the skin. Will irritate the eyes. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves and face shield or goggles. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.</p> |
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| First Aid Instructions: | <p>FIRST AID</p> <p>If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.</p> |
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| First Aid Warnings: | |
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**DIRECTIONS FOR USE
TURF GROWTH MANAGEMENT**

| SITUATION | GRASSES | RATE | | CRITICAL COMMENTS |
|---|---|------------------|------------------------|---|
| | | Per ha | Per 100 m ² | |
| Golf courses and bowling greens | Bent Grass, Bent Grass/Winter grass (<i>Poa annua</i>) mixed sward | 40 to 190 mL | 0.4 to 2 mL | Apply QUALI-PRO® MARVEL-OUS at least 6 hours before or after mowing and when turf is actively growing. Use the lower rates on turf with moderate growth rates where a lower level of growth regulation is required, or when used in a program. Apply rates towards the highest end of the rate range when growth is vigorous or when longer periods of up to 6 weeks regulation are required. Application made to turf growing under cool conditions or to turf with low nutrient levels or where growth rates are low may result in discolouration. Well maintained turf surfaces are those which receive at least weekly mowing and good levels of water and fertility are maintained. Refer to Application section for detailed information. |
| | Hybrid couch | 30 -115 mL | 0.3 -1.15 mL | |
| Golf course fairways | Carpet Grass, Kikuyu | 300 to 800 mL | 3 to 8 mL | |
| | Common Couch | 150 to 300 mL | 1.5 to 3 mL | |
| | Couch varieties: Greenlees Park, Santa Ana, Wintergreen | 100 to 225 mL | 1 to 2.25 mL | |
| | Fescue, Perennial Ryegrass | 300 to 560 mL | 3 to 5.6 mL | |
| Golf course short roughs, Well maintained lawns, General turf surfaces | Bahia grass, Bent Grass, Fescue, Perennial Ryegrass | 400 to 800 mL | 4 to 8 mL | |
| | Buffalo Grass Common Couch, Hybrid Couch | 200 to 400 mL | 2 to 4 mL | |
| | Kikuyu | 300 mL to 1.12 L | 3 to 11 mL | |
| Golf course long roughs, Parks, Ovals, Lawns, General grassed areas | Bent Grass, Fescue, Perennial Ryegrass | 400 mL to 1.12 L | 4 to 11 mL | |
| | Buffalo Grass, Common Couch, Hybrid Couch | 200 to 800 mL | 2 to 8 mL | |
| | Kikuyu | 400 mL to 1.6 L | 4 to 16 mL | |
| Bunker facing, path and garden edging, Footpath and curbside edging, Fencelines, Around trees | Bent Grass, Common Couch, Perennial Ryegrass | 800 mL to 1.12 L | 8 to 12 mL | Apply QUALI-PRO® MARVEL-OUS at least 6 hours before or after mowing and when turf is actively growing. On difficult to mow areas apply QUALI-PRO® MARVEL-OUS to actively growing turf and mow 3 to 4 days after application. Apply in a strip approximately 25 to 50 cm wide. |
| | Buffalo Grass, Couch varieties: Greenlees Park, Santa Ana, Wintergreen | 800 mL | 8 mL | |

| SITUATION | GRASSES | RATE | | CRITICAL COMMENTS |
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| | | Per ha | Per 100 m ² | |
| | Kikuyu | 1.12 to 1.6 L | 12 to 16 mL | Use the lower rates of marvel around bunker edges and the higher rates in the other situations. Application made to turf growing under cool conditions or to turf with low nutrient levels or where growth rates are low may result in discolouration. |

WINTER GRASS (*Poa Annua*) MANAGEMENT

| SITUATION | GRASSES | RATE | | CRITICAL COMMENTS |
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| | | Per ha | Per 100 m ² | |
| Golf Course Fairways, Golf Course Greens | Winter Grass (<i>Poa annua</i>) | 80 to 200 mL | 1 to 2 mL | See instructions under Winter Grass (<i>Poa annua</i>) Management for reduction of <i>Poa annua</i> swards in Bent Grass golf greens. See Golf course greens section above for application recommendations |

Bahia grass (*Paspalum notatum*) Suppression and Seedhead Control

| SITUATION | GRASSES | RATE Per ha | CRITICAL COMMENTS |
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| Common couch, Durban Grass, Hybrid Couch, Qld Blue Couch, Zoysia only In golf courses long roughs, lawns, median strips, ovals, parks, roadsides, general grassed area | Bahia grass (<i>Paspalum notatum</i>) suppression and seedhead control | 400 to 800 mL Plus 28 to 55 g/ha Quali-Pro® Negate® | In bahia grass dominant turf areas, where suppression or elimination of bahia grass may leave noticeable bare areas, use the lower rate of Quali-Pro® Negate® and Quali-Pro® Marvel-ous®. This will eliminate bahia grass seedheads and suppress growth, while allowing desirable species to re-establish without competition. Where desirable grasses are dominant and the aim is to quickly remove bahia seedheads and vegetative growth, the higher rates may be used. |

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION