# DROXID



Titan Copper Hydroxide is an easy-to-use copper fungicide for protection against fungal and bacterial diseases in vegetables, fruit, and a range of other crops. It provides strong disease control in with reduced rates compared to other copper products.

# **KEY FEATURES**

- Organic Certification Approved by Ecocert
- High quality water dispersible granule
- Registered for use on an extensive range of crops
- Good compatibility and mixability
- Excellent protection against a broad range of diseases
- Fungicide MOA Group M1

# **AT A GLANCE**

**CROPS:** 

Almonds, Apples, Avocados, Apricots, Cherries, Citrus, Lychee, Macadamias, Mangos, Nectarines, Peaches, Pears, Plums, Vines, Walnuts, Kiwifruit, Passionfruit, Pecans, Tropical Fruit, Bananas, Beans, Faba beans, Brassicas, Capsicums, Carrots, Celery, Cucurbits, Lettuce, Onions, Parsnip, Peas, Potatoes, Red beet, Rhubarb, Silver beet, Spinach, Tomatoes, Tobacco seed beds, Ornamentals

**FORMULATION:** 

Water-dispersible granule (WG)

**ACTIVE INGREDIENT:** 

Copper Hydroxide 400 g/L

**APPLICATION RATE:** 

90 -260 g/100 L of water (depending on disease, timing, and crop)

FUNGICIDE MOA GROUP: Group M1

# **DISEASE SPECTRUM**

\*see product label for specific crops and situations\*

\*Shotthole, Leaf curl, Black spot, Anthracnose, Bacterial gummosis, Freckle, Smoky blotch, Scab (lemons), Parasitic algae, Husk spot, Pink limb blight, Downy mildew, Walnut blight, Phytophthora stem canker, Cercospora leaf spot, Melanose, Common blight, Halo blight, Bacterial brown spot, Rust, Chocolate spot, Black rot, Leaf spot, Ring spot, Bacterial canker, Bacterial soft rot, Angular leaf spot, Irish blight/Late blight, Wildfire

#### POISON

KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

# COPPER DROXIDE 400 WG

GROUP FUNGICIDE





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# SUCCESSFUL APPLICATION

#### **DILUTE SPRAYING:**

## **NOZZLE SIZE**

Apply using a sprayer fitted with cone nozzles operated at pressures that produce a MEDIUM to FINE spray.

#### COVERAGE

Use a sprayer that is designed to apply high volumes of water to the point of run-off. Thorough coverage of the plant is essential for maximum product effectiveness.

#### SPRAY VOLUMES

With plants such a vegetables, spray volumes must be increased as the plants grow.

# SPRAYER CONFIGURATION

The configuration of the sprayer may need to be altered as the plants grow and change shape.

#### **CONCENTRATE SPRAYING:**

#### **EQUIPMENT**

Use a sprayer that is designed and set up for concentrate spraying.

#### **PRODUCT RATES**

Determine an appropriate dilute spray volume (See Dilute Spaying above) for the crop canopy by referring to the calculation on the product label.

#### SPRAYER CONFIGURATION

The configuration of the sprayer may need to be altered as the plants grow and change shape.

# LIMITING FACTORS

Copper is generally recognised as a very consistent and reliable product, but it cannot be taken for granted. Under some conditions, it may not produce the even and extended results you expect. Those conditions include:

- When Titan Copper Hydroxide is not properly dispersed and kept in suspension in the spray tank.
- If applied during the hottest part of the day when temperatures are expected to exceed 35°C.
- When rain falls after application and spray has not yet dried.
- When applied to wet crops.
- When thorough plant coverage is not achieved.

# THOROUGH MIXING & DISPERSION

While most mixing systems will produce good results, it is very important to:

- Fill the spray tank with good quality water.
- With the agitation system operating, pour the required quantity of Titan Copper Hydroxide into the spray tank in a steady stream.
- **<u>DO NOT</u>** pre-mix Titan Copper Hydroxide with water prior to adding to the spray tank.
- If other pesticides are being used, fully mix the Titan Copper Hydroxide in the spray tank before adding other products.
- Sprays containing Titan Copper Hydroxide should be used within three hours of preparation.
- Maintain constant agitation.

# **INTEGRATED DISEASE MANAGEMENT**

Resistance to M1 fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungal population if these fungicides are used repeatedly and resistant fungi will not be controlled by this product or other Group M1 fungicides, thus resulting in a reduction in efficacy and possible yield loss. Use this product as part of an integrated disease management program involving fungicides with other modes of action and non-chemical methods of control.

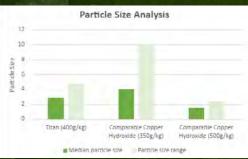
# ANALYSIS RESULTS ------

## **PARTICLE SIZE ANALYSIS**

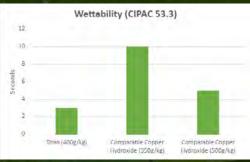
When looking at particle size analysis, Median particle size depicts the average particle size and Particle size range depicts the upper end of the particle distribution (a representation of the largest particles within the curve). In both cases the smaller the number, the smaller the particle size. Smaller particle size allows for greater product efficacy.

# WETTABILITY

When measuring product wettability using the CIPAC 53.3 method, the sample of product is weighed and dropped into a beaker at a specific height then timed for complete wetting. Products that take longer for complete wetting have a higher wettability time.



As seen above, Titan Ag Copper Hydroxide 400 WG demonstrates a smaller particle size range meaning the product has a more uniform particle size.



As seen above, Titan Copper Hydroxide has the fastest wettability out of the three comparable products tested.



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