



Ranman fungicide protects yields

With a new mode of action on Cucurbits

Ranman® fungicide, marketed by FMC, has a unique mode of action that provides highly effective control and excellent prevention of **Downy Mildew in cucurbits** when applied as a foliar treatment. Unlike most fungicides that only control some disease stages, Ranman is active in all stages of the disease life cycle. It provides excellent protection against diseases caused by oomycetes, especially infection by pathogens of the genera of *Pseudoperonospera*, *Phytophthora*, *Pythium*, and *Plasmapara*. Ranman is an excellent fungicide for protecting yields in cucurbits, potatoes and carrots..

Labeled Crops and Diseases:

Ranman prevents **Downy Mildew** in cucurbits, **Late blight** and **Late blight tuber rot** on potatoes, and suppression of **Cavity spot, root dieback/forking** in carrots. A short pre-harvest interval of 1 day in cucurbits, 7 days in potatoes, and 30 days in carrots fit common cultural practices. Re-entry is 12 hours. Crops not on the label can be planted 30 days after the last application. Ranman is not recommended for use in greenhouses.

Downy Mildew Cucurbits:

Crops in the Group 9 vegetables include but are not limited to balsam apple, balsam pear, cantaloupe, chayote fruit, Chinese cucumber, Chinese wax gourd, citron melon, cucumber, edible gourd, melon, muskmelon, pumpkin, squash, summer squash, watermelon, West Indian gherkin and winter squash. For Downy mildew control use 0.15 to 0.2 L in 200 to 600L of water per hectare on a 7 to 10 day schedule. Applications should include the use of a surfactant. Begin applications with initial flowering or when disease conditions are favourable for disease development, but prior to disease development. Alternate applications with fungicides with a different mode of action for the control of downy mildew.

Good Residual Activity:

Ranman's affinity to waxy surfaces of the crop ensure superior rain fastness and long residual control.

Unique Mode of Action:

The unique mode of action of the active ingredient inhibits all stages of oomycetes fungal development, including zoospore release and motility, cytospore germination, mycelial growth, oospore formation, and zoosporangia formation.

GOOD SPREADING PROPERTIES:

Ranman has a very low water solubility (0.1 ppm) but good spreading properties on the plant surface. The use of an adjuvant contributes to further promote thorough plant coverage. Outstanding wetting ability on crop foliage is a beneficial characteristic, especially for protectant and locally systemic fungicides, as a thorough foliage coverage is desired. Rain fastness forms very soon after Ranman application.

EXCELLENT FUNGICIDE PROTECTION:

Ranman is a contact fungicide, which is classified as a protectant with anti-sporulating effects and has limited systemic activity. It can be applied by ground, chemigation, or aerial application.

ONLY FUNGICIDE IN FRAC GROUP 21:

Ranman is formulated as a suspension concentrate (SC) with 400 g/L or 34.5% of the active ingredient cyazofamid. Ranman belongs to the cyanoimidazole chemical class and is the only fungicide in FRAC Group 21.

RESISTANCE MANAGEMENT:

Ranman provides growers with a much-needed novel mode of action for resistance management as an alternative to existing fungicides. Ranman is a key product for the prevention of **Downy Mildew**. There are no documented cross-resistance of Ranman with existing fungicides. Ranman should be part of a disease management program including alternate spray of fungicides with a different mode of action, Do not make sequential applications of Ranman and do not make more than 6 applications of Ranman per season.

NON-VOLATILE PRODUCT:

Ranman is classified as a non-volatile compound as the active ingredient has a low vapor pressure ($<1.33 \times 10^{-5}$ pascals @ 25°C).

REDUCED RISK CHEMISTRY:

The active ingredient in Ranman has minimal to moderate acute toxicity in acute oral, dermal and inhalation tests. It is minimally irritating to the eyes and skin, and is a weak dermal sensitizer.

For more information visit www.uap.ca or contact your local Retailer



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Always read and follow label directions.

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