



PREV-AM ULTRA SPRAY GUIDE

3-in-1 INSECTICIDE-FUNGICIDE-MITICIDE





PREV-AM® ULTRA is a 3-in-1 contact insecticide, miticide and fungicide.

PREV-AM ULTRA AS AN INSECTICIDE AND MITICIDE

Insects/mites are protected by a water repellent layer that loses its effectiveness when contacted by a PREV-AM ULTRA application. This allows the active ingredient to penetrate and destroy the soft, living tissues underneath. The insects/mites are then exposed to the loss of body fluids, causing death. Flying insects experience loss of the protective coverings and tension in the wings, making them unable to fly. Additionally, water repellent hairs protecting the flexing points in insects lose their effectiveness, allowing PREV-AM ULTRA to penetrate to their susceptible body parts, which are then destroyed. On some insects/mites the ultralow surface tension of PREV-AM ULTRA allows an influx into the respiratory organs, causing internal suffocation.

PREV-AM ULTRA AS A FUNGICIDE

The PREV-AM ULTRA solution wets the protective membranes of the superficial fungal mycelia (hyphae) and spores, allowing the active ingredient to penetrate and destroy the living tissues underneath. This exposes the organism to the drying effect of the atmosphere and causes collapse within 2 to 24 hours. Plant tissue damaged by the fungus may also dry out and prevent further spread of infection, but healthy tissue is not affected at the recommended application rate.

PREV-AM ULTRA AS A RESISTANCE MANAGEMENT & IPM TOOL

PREV-AM ULTRA can be a valuable addition to insect and disease management spray programs. Its unique physical mode of action makes resistance development highly unlikely. Adding PREV-AM ULTRA to a spray program can extend the useful life of pesticides that may be susceptible to the development of resistance. PREV-AM ULTRA can either replace application(s) of a susceptible pesticide or be added as an additional application in the spray rotation. The quick knockdown of PREV-AM ULTRA makes it a great addition to an IPM program. An application can be timed to control insects and diseases only when they reach the economic threshold, and because it is a contact pesticide and has no residual activity PREV-AM ULTRA applications can be made to avoid impacting beneficials.

PREV-AM ULTRA AS A TANK MIX PARTNER

Adding PREV-AM ULTRA to a tank mix with residual insecticides, fungicides and miticides is a highly effective strategy for controlling pests. PREV-AM ULTRA will provide quick knockdown of existing pest populations to minimize crop damage while allowing the residual pesticide the time to become active for longer term control.

RECOMMENDED USE GUIDELINES

- Use 0.4% to 0.8% PREV-AM ULTRA by volume (50-100 oz. per 100 gal. tank-mix solution)
- Direct spray to ensure maximum coverage of the entire plant
- Tank mix with the appropriate residual materials if extended control of target pests is needed
- Use PREV-AM ULTRA prior to harvest to clean up insect and disease infestations. It delivers quick knockdown occurs with a 12-hour PHI and REI and is exempt from Maximum Residue Level (MRL) tolerances
- Always read and follow label directions

FEATURES AND BENEFITS

FAST ACTING

PREV-AM ULTRA is an ideal “rescue” treatment for sudden outbreaks and population explosions or as a pre-harvest, clean-up spray. Its quick knockdown can stop some pests in minutes and, in general, its level of control is accomplished within 24 hours.

BROAD SPECTRUM

Its control of insects, diseases and mites means growers don't have to buy multiple contact pesticides to control these pests – saving them money and reducing storage and inventory concerns.

SUPERIOR SPREADING AND COVERAGE

The OROWET technology contained in PREV-AM ULTRA provide outstanding spreading on the leaf surface, prevents run-off and moves it into hard-to-reach areas where insects, diseases and mites hide. In a tank mix with other pesticides PREV-AM ULTRA distributes the spray solution evenly on the plant surface to help prevent phytotoxicity and to improve control.



Citrus leaves after wetting with industry standard mineral oil at a concentration of 0.3% v/v



Wetting citrus leaves with PREV-AM ULTRA significantly improves coverage of both the inner and outer canopies

VERSATILE

PREV-AM ULTRA can be used alone for quick knockdown or tank mixed with other residual pesticides for a knockdown/residual activity application.

EASY TO USE

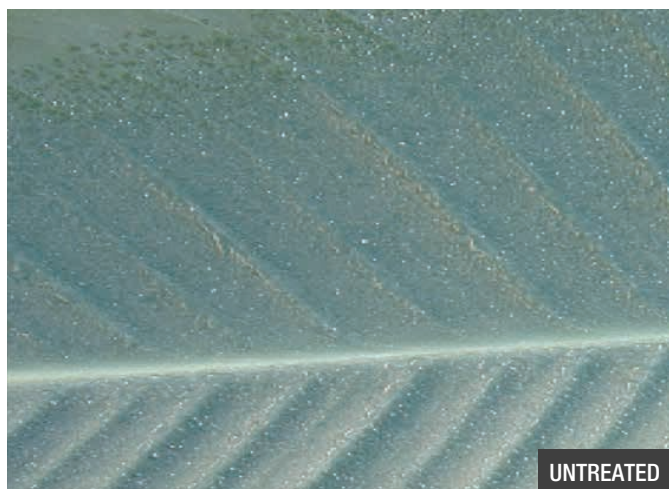
PREV-AM ULTRA requires no additional adjuvant be added to the spray tank. It is also effective within a wide range of pH levels so no buffer is required.

CROP FRIENDLY

PREV-AM ULTRA can be used on an extremely wide variety of field and row crops, fruits, vegetables, tree nut and ornamental crops to help simplify growers' pesticide decisions.

REWETTING OF LEAF SURFACES

Even after a PREV-AM ULTRA treatment has dried on the plant surface it rewets and spreads moisture, such as dew, to allow quicker drying and reducing the sporulation period of pathogens.



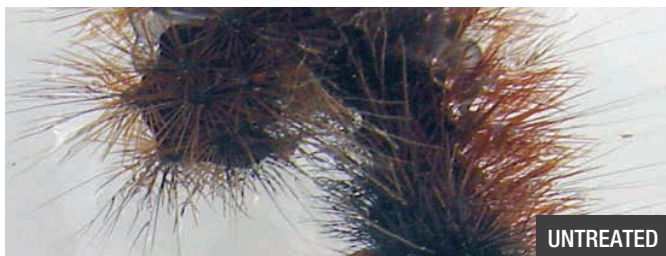
Untreated strelitzia leaf.
With droplets of morning dew still clearly visible on the leaf surface



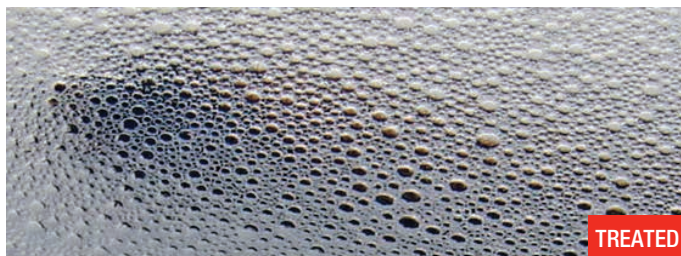
Strelitzia leaf treated with PREV-AM ULTRA 2 days earlier. Morning dew has been redistributed keeping the leaf surface drier and shortening the sporulation period

HOW PREV-AM ULTRA WORKS

SUFFOCATION



Hairy caterpillar floating on the surface of untreated water
The surface tension of the untreated water is strong enough to support the full weight of the hairy caterpillar.



The same caterpillar in a 0.05% solution of PREV-AM ULTRA: The reduced surface tension allows PREV-AM ULTRA to enter the insect's body, through the spiracles causing suffocation.



Whitefly, and other insects with waxy wings, are very vulnerable to PREV-AM ULTRA.



After just a few minutes, a 0.4% application of PREV-AM ULTRA has destroyed the wings of this whitefly.

INSECT-EXOSKELETON DISRUPTOR



Vineyard mealybug 10 minutes after the application of PREV-AM ULTRA at a concentration of 0.4%.



40 minutes after the application of PREV-AM ULTRA at concentration of 0.4% - body fluid oozing out of the mealybug is clearly visible.

DISEASE CELL-WALL DISRUPTOR



Cucurbits treated with **eight** applications of a 10% ciproconazol solution to eradicate a serious powdery mildew infestation, showing hardly any signs of improvement.



A row of cucurbits treated once with PREV-AM ULTRA at 0.4% concentration as a curative measure. **Recommendation:** Use PREV-AM ULTRA at 0.4% concentration throughout season to effectively prevent disease outbreaks

FREQUENTLY-ASKED QUESTIONS



HOW LONG DOES IT TAKE FOR PREV-AM ULTRA TO WORK?

PREV-AM ULTRA is a contact pesticide that begins controlling pests and diseases immediately upon contact. Because of its quick knockdown action its effectiveness in the field should be evaluated within 2 to 48 hours after application.

HOW LONG WILL PREV-AM ULTRA LAST IN CONTROLLING INSECTS AND DISEASES?

PREV-AM ULTRA is a contact action pesticide with no residual activity. It is therefore essential that good coverage of target pests be accomplished. Once the spray has dried, the insecticidal and fungicidal activity of PREV-AM ULTRA is complete. If residual control of pests or diseases is needed, combine a residual pesticide in a tank mix with PREV-AM ULTRA. PREV-AM ULTRA will provide a broad spectrum knockdown of existing pest populations while allowing the residual product(s) time to become active.

HOW MUCH PREV-AM ULTRA DO I USE?

Always read and follow the product label for specific instructions. In general, use a rate of 0.4% solution by volume or 50 oz. per 100 gallons of water. As allowed per the label, tougher diseases and insects may require dosages of up to 0.8% solution by volume or 100 oz. per 100 gallons. It is recommended to test spray on horticultural crops if higher rates are needed.

IS PREV-AM ULTRA SAFE?

PREV-AM ULTRA has a favorable toxicological profile. The EPA's review of PREV-AM ULTRA resulted in the product being exempt from Maximum Residue Level (MRL) tolerances. It has a 12-hour PHI (Post Harvest Interval), 12-hour REI (Re-Entry Interval) and no special Worker Protection Safety (WSP) requirements.

DOES RAINFALL OR OVERHEAD IRRIGATION AFFECT PREV-AM ULTRA RESULTS?

Because PREV-AM ULTRA acts on contact with insects and diseases, application of the product should not be done during periods of rainfall or overhead irrigation. However, rainfall or irrigation following the application will not affect the efficacy on insects or diseases.

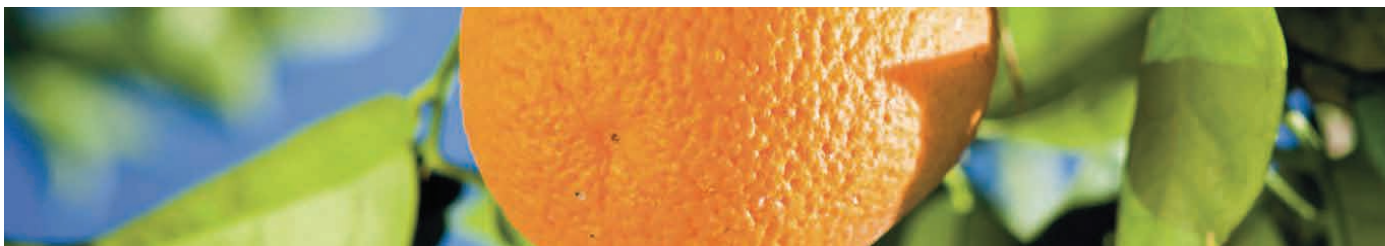
CAN I TANK-MIX PREV-AM ULTRA WITH OTHER MATERIALS?

Yes, PREV-AM ULTRA is an ideal tank mix partner with residual pesticides if a pest population is already present and residual control of the pests and diseases is needed. PREV-AM ULTRA will provide a quick knockdown of the pest populations while allowing the residual pesticides enough time to become active. When PREV-AM ULTRA is used in a tank mix it is not necessary to add any additional surfactants. As recommended with tank mixes, always conduct a jar test to ensure compatibility of the products to be combined.

WHAT VOLUME OF SPRAY WATER PER ACRE SHOULD I USE?

Because PREV-AM ULTRA is a contact pesticide it is essential for good control that the spray solution come in direct contact with the target pest(s). Growers should use enough water to provide complete coverage of the pests.

FREQUENTLY-ASKED QUESTIONS



WHAT TYPE OF APPLICATION EQUIPMENT CAN BE USED?

PREV-AM ULTRA can be applied with all common types of spray equipment. However, as with all foliar sprays, the application must ensure the spray material reaches all target surfaces, i.e. the inner and outer canopy of hedge-rows and tree crops and the upper and lower leaf surfaces of row crops. Spray nozzle selection and orientation is critical to an effective application.

WHAT LIFE STAGES OF INSECTS AND DISEASES DOES PREV-AM ULTRA CONTROL?

Due to its physical mode of action PREV-AM ULTRA has efficacy on many the life stages of insects and diseases. In insects, PREV-AM ULTRA has demonstrated control of eggs, nymphs, larvae, winged adults and worms. In diseases, PREV-AM ULTRA has demonstrated control of spores, mycelia and feeding structures (hyphal pegs). Certain life stages are easier/harder to control depending on how well the PREV-AM ULTRA treatment can physically contact them. Spray application timing and techniques should be used that maximize the coverage of the target pests.

CAN PREV-AM ULTRA HELP WITH RESISTANCE MANAGEMENT?

Yes, PREV-AM ULTRA can be a powerful tool in helping to manage insect and disease resistance. Adding it to your spray program provides an additional active ingredient that can extend the use of pesticides susceptible to the development of resistance. Applying PREV-AM ULTRA as pests and diseases approach their economic threshold will knockdown populations and can delay the use of other active ingredients. Due to the physical mode of action the development of resistance to PREV-AM ULTRA is highly unlikely.

IS PREV-AM ULTRA ORGANIC?

No, PREV-AM ULTRA is not a certified organic pesticide.

CAN I USE LOWER RATES OF OTHER PRODUCTS WHEN I AM USING PREV-AM ULTRA?

Oro Agri recommends following label directions and local recommendations for rates and timings of other materials. In addition to contact performance, PREV-AM ULTRA has highly effective surface tension reduction and coverage improvement capabilities which may enhance the performance of most other products when combined in tank mixes. PREV-AM ULTRA will control a broad spectrum of other non-targeted insects and diseases before they are detected or become problematic. This effect may lower demand of other systemic or translaminar products.

HOW IS PREV-AM ULTRA PACKAGED?

PREV-AM ULTRA comes in 2 × 2 ½ gallon cases and 265 gallon totes.

WHERE CAN I FIND PREV-AM ULTRA?

PREV-AM ULTRA is sold through select ag chemical distributors and retailers. If your local ag chemical dealer does not carry PREV-AM ULTRA please visit www.oroagri.com/northamericacontact to locate your local Oro Agri sales representative. Or call us at (559) 442-4996 for more info.