

Mode of Action

Cyproconazole belongs to the triazole group of ergosterol-biosynthesis inhibitors (EBI's). It is taken up by the plant and distributed acropetally through the sap stream. It acts on the fungal pathogen during penetration and haustoria formation. Cyproconazole stops the development of fungi by interfering with the biosynthesis of cell membranes. It has preventive and strong curative activity.

Spectrum of activity

Coffee Hemileia vastatrix leaf rust Beans Uromyces phaseoli bean rust Recommendations for use

To avoid risks to man and the environment. comply with the instructions for use.

Coffee: (leaf rust)

Spray at the first sign of infection (before 10% of the leaves are infected). Apply 250 mls in 500-800 lts of water/ha; or 10 mls in 20 litres to treat 45 to 50 coffee trees. If more than 10% of leaves are infected, apply 500 mls in 500-800 litres of water/ha; or 20 mls in 20 litres of water.

<u>Please note:</u> The coffee trees should have been properly pruned before the spraying season, in order to get a better spray penetration and cover. **Beans:** (beans rust)

Apply 500 mls in 200-400 litres of water/ha; or 50 mls in 20 litres of water. Spray at the first sign of disease appearance and repeat after 7 days.

Spraying Equipment

ALTO[®] can be applied with conventional tractor boom sprayers, motorized knapsacks sprayers and knapsack sprayers. The equipment must be properly calibrated to provide thorough and even coverage of the whole plant, in particular also of the lower plant parts. Flush spray equipment thoroughly with plenty of clean water after use.

Mixing

For sprayers with agitators, ALTO[®] can be added directly to the water in the spray tank. Fill two thirds of the spray tank with water. Pour progressively the amount of water required into the tank while the agitator is operating.Agitate thoroughly while mixing and spraying. For sprayers without agitators, half fill the spray tank with water, add the required amount of Alto 100 SL, mix thoroughly and fill the tank with water upto the level required. Pre-mix the required quantity of product with a small volume of water. Add the slurry to clean water in the half-filled spray tank. Maintain agitation while topping up. Always stir the spray mixture well and apply within a few hours.

Compatibility: ALTO[®] may be mixed with major commonly used fungicides, insecticides and nutrients. A physical compatibility test should always be carried out first.

Operator Safety: ALTO[®] is slightly hazardous to humans. Avoid getting product in contact with skin, eyes or clothing. Do not inhale spray mist. Wash hands and face before eating, drinking or smoking. If indisposition occurs, stop work immediately and apply first aid measures. Wear protective clothing (overalls, gumboots, face shield, gloves, hat or cap) when spraying. After work, wash entire body thoroughly. Clean work clothing and protective equipment immediately after work.

Storage: Store away from sun and damp. Store in original tightly closed containers in a well-ventilated area. Avoid storage above 35⁰ C. Store under lock and key, away from foodstuffs, animal feeds, children, animals and unauthorized persons.

Product and Container Disposal

Dispose of surplus product on a landfill site approved for pesticides, or divide remainder into small-quantities and bury in a safe place away from water supplies. Dilute small quantities of surplus spray mixture with plenty of water and spray on fallow land. Dispose of containers in a landfill site approved for pesticides, or burn in a safe place. Do not re-use empty containers for any other purpose, especially not for food, feed or storing drinking water.

Leakage and Spillage

Remove heavily contaminated soil and bury in a safe place away from water supplies. Spillage: soak up with sand, sawdust, soil or an oil binding agent. Collect contaminated material thoroughly and bury in safe place or put in a waste bin or plastic bag, mark it and dispose of on a landfill site approved for pesticides. Treat spill area with plenty of water. Do not re-use spilt product. <u>Note</u>: Spilt product must not be used.

Environment and Wildlife: Do not contaminate stagnant water or running water by disposal of product waste. The treated area must not be grazed, and no food or feed should be collected from it for a period corresponding to the pre-harvest interval. Do not enter treated area before the spray has completely dried.

FIRST AID INSTRUCTION

If poisoning is suspected, stop work immediately and call a physician. Remove patient from further contact with the pesticide and strip off all contaminated clothing. Move patient to a well-ventilated area. In case of contact with skin and eyes, wash immediately with plenty of water. Rinse splashes from eyes with abundant fresh and clean water for at least 10 minutes. If inhaled move patient to clean air. If ingested, repeatedly administer medicinal charcoal in plenty of water. Seek medical attention if a large quantity of concentrate was ingested.

Note: Never give anything by mouth to an

unconscious person and never induce vomiting.

WHO Class: III (unlikely to present acute hazard in normal use)

Antidote: No specific antidote is known. Apply symptomatic therapy.

Shelf life: At least 2 years from the date of manufacture in original, unopened container.

User's Risk

The manufacturer warrants the quality of their product so long as it is acquired in the original sealed container. Many factors (e.g. application method, type and variety of crop, soil, climatic factors, resistance, etc) may affect the performance of the product. The user bears the risk of damage resulting from such factors that are beyond the manufacturer's control. The manufacturer declines all liability for damage resulting from improper storage or use of the product.

Approved by TPRI, Arusha

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