











A broad spectrum agricultural FUNGICIDE with limited bactericidal activity. Kannar Kanguard 940[™] fungicide is formulated to perform to the highest degree of efficacy, WITHOUT THE

HARMFUL RESIDUES and fungicidal resistance that are associated with hard synthetic chemicals.

• Registration according to local regulatory authorities on a wide range of Fungi • Ecocert certified • Manufactured in ISO 9001 certified factory • No harmful residues • No genetic resistance by harmful fungi against this fungicide • USA FDA,GRASS • Certified (Generally regarded as safe) • Ecocert • Biodegradeable.

plant diseases:

Application of Kannar Kanguard 940™ to PREVENT blant diseases:

Kanguard 940[™] has a systemic action which prevents plant disease infection. Kanguard 940[™] contains an organic liquid suspension of physically activated ascorbic acid mixed with various other organic acids from plant origin. Kanguard 940™ induces the accumulation of common phenolic compounds which assist in the fight against toxic fungi.

of the cell wall of the fungi and therefore there is no genetic

Kanguard 940[™] contains organic compounds that kill pathogens by direct contact. Kanguard 940™ increases the permeability (osmosis) of the cell walls of harmful fungi. It acts on the structure

resistance to this fungicide by harmful fungi.

Application of Kannar Kanguard 940[™] to CURE

Kanguard 940[™] has a contact action of Kanguard 940[™]

It promotes the production of phytoalexins: That are toxic to invading fungi and bacteria Absorption of Kanguard 940™ into the plant is mainly through the upper leaf surface. It is then redistributed through out the plant and especially towards the apex of the plant. Repeated applications at 7 day intervals are necessary for the best preventative disease control.

EXAMPLES of plant diseases controlled by kannar kanguard 940™

Powdery mildew (Uncinula necator; anamorph Oidium tuckeri) Prevented and cured by Kanguard 940™





Powdery mildew symptoms on butternut

Powdery mildew is an obligate parasite which means it requires a living plant host to complete its life cycle. The windborne conidia of powdery mildew can germinate at temperatures ranging from 10° C to 35° C. Once infection becomes established, depending on the genus, daytime temperatures above 30° C and cool nights accelerate symptom development.

Powdery mildew produce superficial hyphae on leaves, stems, flowers and fruit. Conidia borne singly or in chains contribute to the white, powdery appearance of infected leaf surfaces. Necrosis of leaf surfaces may replace the presence of hyphae. It is difficult to control environmental conditions, therefore the main method of control is through chemical or organic intervention.

Grev mould (Botrytis cinirea) Prevented and cured by Kanguard 940™





Botrytis cinirea and sour rot symptoms on table grapes

This pathogen may cause symptoms which include spots, blights, crown rot, cankers, cutting rots and even damping-off. Wounds or senescent tissues are especially susceptible to infection. Storage tissues are also particularly vulnerable, while post harvest rots may prove to be destructive. The initiation and maintenance of an epidemic of grey mould depends on a complex sequence and interaction of biological events, such as the production and dispersal of various inocula, infection, and pathogen survival.

Each event is predisposed and determined by different sets of environmental and agricultural factors such as temperature, rainfall, humidity and crop protection practices, and nutrition and crop phenology. Susceptibility to Botrytis increases exponentially with the presence of other pathogens or stress factors. Stressed plants are very vulnerable to infection. Fruits place a reproductive stress on the plants applicable. Keeping the stress levels down are a prerequisite for control. Keeping the infection potential to a minimum are essential. In other words, wounds, stressed plants and inocula (rotten fruit and infected leaves) should be limited. Conidia can survive for a relatively shorter period than mycelium. Conidia are dry and dispersed in air currents, in or on splashing water droplets and by insects. Kanguard 940™ will promote plant health and limit available superficial inoculum.

Bacterial leaf spot (Xanthomonas campestris v. vesicatoria) Prevented and cured by Kanguard 940™





Bacterial leaf spot symptoms

This bacterium causes diseases on a wide range of plants and affect all above ground parts. Brown, circular spots may appear water-soaked during rainy periods. Spots on leaves may coalesce and may be confused with early blight, grey leaf spot or target spot and is surrounded by a prominent halo with no concentric rings visible. Fruit lesions resembles a slightly raised blister which becomes more like a scab with age. Seed and plant debris may be volunteers.

High humidity and temperatures of 24°C to 30°C induce disease and symptom development. Wind, water, insects and humans spread this bacterium through wounds, stomata, insect punctures and other mechanical means. Unhygienic pruning methods or other practices that may cause fresh wounds will offer direct penetration opportunities. Disposal of crop residue is of utmost importance. Eliminate potential volunteers. Sterilize between crop rotations. Xanthomonas campestris pv. Vesicatoria could be effectively controlled with bactericides.

Bacterial canker (Clavibacter michiganensis) Prevented and cured by Kanguard 940™





Clavibacter michiganensis' occurrence is sporadic, but can be devastating. Symptoms include wilting and secondary symptoms like marginal leaf necrosis, due to obstruction of the vascular tissue. Inocula for this disease survives unfavourable conditions in soil in plant debris, weed hosts, volunteer plants, contaminated wooden stakes and seed. Splashing water, contaminated equipment, and workers will cause secondary spread.

Secondary dissemination often results only in foliar symptoms, bird's-eye fruit spots. Hygiene is the key in controlling a bacterial infection. Sterilise scissors and wash the clothes of workers every day. Restrict the movement of possible contaminated workers through tunnels and wash hands between rows when harvesting. Bactericides will be effective in order to limit available inoculum on plant material, as well as a general sanitation of applicable risk or contamination areas.

KANGUARD 940™ IS DISTRIBUTED BY:

MANUFACTURED UNDER STRICT QUALITY CERTIFIED STANDARDS



KANGUARD 940™ Reg No: L7421 Act 36/1947



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