Hortifeeds

HortiStar

Silicon fertiliser for use on all crops

SILICON - 'THE FORGOTTEN ELEMENT'

- Silicon nutrient maximizes plants' natural defences
- Aids uptake of other nutrients in tank mixes
- Reduces drought and salt stress by regulating leaf water content
- Maintains photosynthesis at near optimum levels under stress conditions
- Strengthens leaf cells to increase resistance to pests and pathogens
- Provides physical control of many insect pests
- Excellent spreading and penetrating properties, enabling fast and effective assimilation into plant tissues

Our technical representatives will be pleased to provide additional information on our services and application of our fertilisers. You can also visit our website at www.hortifeeds.co.uk for more information on our products and services.

HortiStar Silicon Fertiliser

Protecting Plants Under Stress

Silicon, 'the forgotten element in plant nutrition, has protective effects on plants under stress and its benefits are evident under conditions of drought, adverse temperature, pest or pathogen attack.

HortiStar is a highly effective and readily absorbed ortho-silicic acid foliar fertiliser that supplements the limited availability of silicon in water supplies. Ortho-silicic acid is the most readily plant available form of silicon, greatly superior to potassium silicate products.

Silicon is a biologically active element that triggers and supports plants' natural defence mechanisms. Abiotic and biotic-influenced toxicities are alleviated by silicon. Its importance is demonstrated by the fact that the amount of silicon in healthy leaf tissue is similar to that of many major nutrients.

HortiStar reduces drought, heat and salt stress by regulating leaf water content. Plant productivity is maintained under conditions where water is in short supply or salt levels restrict uptake. Physically stronger epidermal cells resist direct heat damage.

HortiStar silicon maximize plants' natural production of phytoalexin compounds which resist invasion at sites under pathogen attack.

It increases resistance to pests and pathogens.
As HortiStar oxidises to silicon dioxide and ethanol, silicon crystals form on and in the leaf. Fungal penetration and insect feeding are both resisted by these external and internal barriers.

HortiStar has a physical effect on many insect pests including aphids, thrips, two-spotted mites, mealy bug and scale. HortiStar is non-toxic and works through suffocation and desiccation only. Good contact and cover of insect pests is required and, as there is no persistent effect, repeated applications are required.

It may harm beneficial bio-control agents on contact, but re-introduction is possible as soon as the spray has dried on the plant tissue.

HortiStar has excellent inherent spreading and penetrating qualities enabling effective and rapid assimilation into plant tissues.

HortiStar has zero harvest interval when used alone or in combination with other fertilisers.
If HortiStar is tank-mixed with a pesticide, the harvest interval for the pesticide used in combination with a silicate product must be observed.

Always read the pesticide label and data sheet prior to use.
Tank mixes are at the user's own risk.

Application Rates

HortiStar is effective as a silicate fertiliser at applications of 0.025% to 0.25% concentration.

- For use alone: add 1 litre of HortiStar to 400 to 1,000 litres of water and apply to 1 ha
- For small areas: add 10ml of HortiStar to 10 litres of water and spray over 100 m^2 or to point of run-off.
- Used in combination: 250ml/ha in 400 to 1,000 litres of water. For small areas use 2.5ml in 10 litres of water over 100 m^2
- Can also be applied in fertigation solution: add 1.8 litres of HortiStar to 100 litres of stock, for dilution at 1:100
- Covering contact of insect pests is required for effective physical control
- Optimum pH range for HortiStar is 5.5 to 8.5
- Users should conduct phytotoxicity tests on target crops prior to use.
- HortiStar can be tank mixed with most soluble fertilisers and many pesticides (at user's own risk - always read pesticide label prior to use)

Mixing

- Application equipment must be clean and functioning correctly prior to use.
- Fill the tank by 70% prior to adding HortiStar and other ingredients.
- Agitate well and continue to maintain minimum agitation.
- Use within 36 hours of mixing.
- Wash out all equipment after use, in accordance with safe washing practice.
- Do not store unused, diluted HortiStar.

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