FACT SHEET No.6

MM & GOLF GREENS

mineral magic

Making soils better & wetter - permanently

Mineral Magic & Golf Greens

Amorphous silica, (Mineral Magic) when added to the soil profile of a golf green, can provide several benefits:

Improved Soil Structure: Amorphous silica can enhance soil aggregation, leading to improved soil structure. This helps create a more stable and porous soil profile, allowing for improved hydraulic conductivity and root penetration.

Increased Cation Exchange Capacity (CEC): Silica can raise the CEC of the soil, which means the soil can hold and exchange more essential nutrients like calcium, magnesium, and potassium. This promotes nutrient availability for the grass, leading to healthier and greener turf.

Disease Resistance: Amorphous silica will strengthen the plant's cell walls, making it more resistant to fungal diseases and pests. This is also assists with a turgid leaf blade to enhance smooth ball roll.

Stress Tolerance: Silica can enhance the grass's ability to withstand environmental stresses such as drought, extreme temperatures, frost and excessive wear and tear due to foot traffic on golf greens.

pH Buffering: Silica can help buffer soil pH, maintaining it within the optimal range for grass growth. This ensures that the turf remains healthy and vibrant.

Environmental Benefits:
Using amorphous silica in golf course maintenance can reduce the need for synthetic chemicals and fertilizers, which can have environmental benefits by minimizing the potential for nutrient runoff and groundwater contamination.

Enhanced Root Development: Silica stimulates root growth in grass and plants. This results in a denser and more extensive root system, which helps the turf on the golf green withstand stress, recover from damage, and access nutrients and water more effectively. It also provides more food supply to the soil biology via exudates from the root system.

Abrasion Resistance: In high-traffic areas like golf greens, amorphous silica can make the turf more resistant to wear and tear, ensuring a durable and playable surface.

Overall, incorporating amorphous silica into the soil profile of a golf green can contribute to better turf quality, improved playability, disease resistance and reduction in water, chemicals and fertiliser.

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