

Mineral Mulch

Cost-effective Sustainable Soil Amendments

A highly economical Refined not Mined alternative to entrenched agricultural products such as Gypsum with the added Benefit of Silica and other Trace elements.

Silicon (Si) may be one of Earth's most prevalent macronutrients however, its availability to plants is limited unless certain requirements are met *Mineral Mulch Calcium Silicate* is a unique product as it contains both a high percentage of water-soluble silicon and plant available calcium (Ca).

Mono-silicic acid is the only silica form that is absorbed by the plant roots but it requires adequate Calcium to be present to move the silica into the epidermal (outer) tissues and create a Si-cellulose membrane, this in turn makes Mineral Mulch Calcium Silicate with its provided 4 forms of highly available Calcium, Calcium Carbonate (Lime), Calcium Oxide (Burnt Lime, or Slacked Lime), Calcium Silicate and Calcium Sulphate (Gypsum) an ideal agricultural silica and Calcium source.

Our products have been manufactured with the end-user in mind being both easy to store and apply, whilst also being a cost-effective input. Best of all it is sourced from 100% sustainable and recycled materials, containing no substances that will contaminate the soil.

SILICA BENEFITS FOR TURF



- Increased Stress Relief from Drought, Frost, Heat and UV^{1,6,15}
- Alleviation of salt stress³
- Improved Wear Tolerance^{7,16}
- increased blade erectness and photosynthesis for denser, healthier turf¹⁴
- Alleviates the toxicity of metal ions especially Fe, Al, Mn, Pb, Hg, Cd and Zn^{2,4,5,8,9}
- Improved resistance to Excessive Nitrogen stress⁶
- Increases the plant availability of Phosphorus and Potassium, whether deficient or excessive in soil.²
- Improves disease and pest resistance, especially against Mildew¹³, Grey leaf Spot^{11,12} and Turf Mites.¹⁷
- Faster recovery¹⁶
- Denser Root Mass¹⁰
- Adequate Calcium present to move the silica into the epidermal (outer) tissues to create a Si-cellulose membrane which provides protection and increases cut turf storage.
- 4 forms of plant available Calcium Calcium Carbonate (Lime), Calcium Oxide (Burnt Lime or Slacked Lime), Calcium Silicate and Calcium Sulphate (Gypsum).
- Sourced from 100% sustainable and recycled materials.



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“silica deficiencies in the plant reduce the plant’s ability to resist disease and pest attack due to a loss of strength and cell structure”

Silica Deficiency

With nutrients regularly being removed through plant growth and crop harvest and many common fertiliser inputs not replenishing this deficit, nutrients predominantly are being ‘locked up’ by quartz and soil clays (e.g. kaolinite), which must undergo weathering over a number of years before the silicon is made available to the plants, on this basis it is easy to see how silica deficiencies can become common and readily occur in Australian soils.

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