

Salt Affected Crops



Stoller's Aqua Cal is the solution

Analysis

Nitrogen 6% w/v as stabilised ammonium nitrogen
Calcium 12% w/v as soluble calcium

Formulated using Stoller's proprietary technology for root health and salt displacement.

Mode of Action

Aqua Cal makes the roots grow more actively and displaces salt with the positively charged nitrogen and calcium ions.

Key Features

- Very soluble calcium
- Positively charged free Ca and N
- Applied through drip or to weedicide band
- Simulates root hormones (cytokinin)
- Can be mixed with other Stoller products
(Zn, Mn, B, Fe, Co, Mo, Cu, S, K – as required)

Key Benefits

- Starts working straight away
- Frees salt from the root zone
- Easy and accurate application
- Maintains root health in salty soils
- Removes all limiting growth factors

Other considerations

- ❖ Soil moisture and root health are important in salty conditions. Too much water in the roots can deprive them of air and also cause salt to prevail in the water around the roots.
- ❖ Always strive for free drainage in the root zone.
- ❖ Crops low on potassium and magnesium are more susceptible to high salt levels, and symptoms of salt toxicity are often seen in conjunction with these deficiencies.
- ❖ Consider Stoller's Liquid K and WL Magnesium Chelate in this situation.



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Aqua Cal

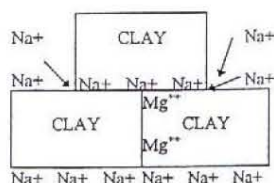
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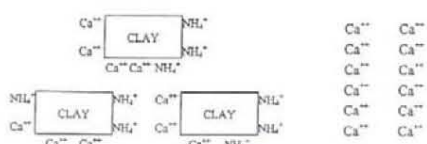
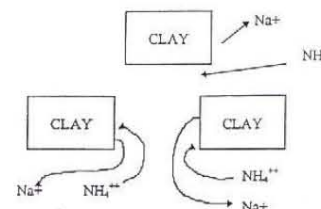
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How Aqua Cal Works



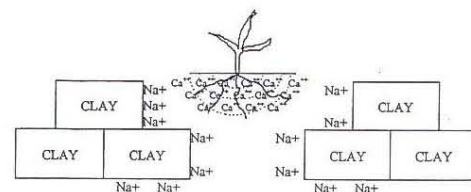
1. Sodium (Na^+) is the element that causes salt damage to the plant. In salty soils it dominates the clay soil particles, sticking them together and restricting soil drainage.

2. The ammonium nitrogen (NH_4^+) in Aqua Cal carries a stronger positive charge than sodium, so when it enters the root zone, it effectively "pushes" the salt away so that it can be leached from the roots.



3. When the nitrogen is taken up by the plant, it is replaced by the calcium supplied by Aqua Cal. This calcium protects the soil from the return of salt for a period.

4. Repeat applications of Aqua Cal ensure that there is adequate calcium in the root zone to keep the sodium away. This calcium will open up the soil, improve drainage and allow sodium and chloride to be leached away, keeping the roots healthy.



AQUA CAL APPLICATION

TIMING	RATE	COMMENT
POST HARVEST IN VINES	50-75 litre/ha	Apply at least one application starting in the second watering Post Harvest. This allows for salt flushing with the assistance of Winter rains whilst the plant is in dormancy.
SPRING APPLICATIONS IN VINES	25-75 litre/ha	Apply the higher rate in the first application to displace salt. Follow up with subsequent treatments at 25-50 litres per hectare. Inject through drip irrigation, sprinklers or centre pivot. Alternatively, band above the root zone and water in. Monitor sodium symptoms to determine number of treatments. (Aim for 1-2 Spring treatments and 1 post harvest treatment)
VEGETABLES - SEASONALLY	25-75 litre/ha	Apply when sodium levels are high at front end of waterings

Rates are a guide only; always refer to Stoller or a local advisor before proceeding

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