



Restore Soil Fertility & Maximize Crop Production & Quality

Silica... the overlooked element that is essential for soil & plant health...

“You are what you eat” is a well known truism. We know we feel healthier and have more energy when we eat wholesome food and now studies are revealing why.

Every day scientists learn more about nature as a pharmacopoeia of edible, protective substances.

A study published in the American Journal of Epidemiology found that lycopene, a nutrient released when tomatoes are cooked, reduces the risk of heart disease, protects the body's cells, reduces the build-up of cholesterol in the blood and may be useful in helping prevent prostate cancer. Lycopene - an everyday nutrient with a vital role.

Silica

Similarly, a common but often overlooked element in soil and plant health is **SILICA**. Silica is just one of many 'bio-essential' minerals but it's importance has perhaps not been appreciated and understood until recently.

Soil microbes convert silica to silicic acid for constant uptake by plants.

Many crops grown by Australian farmers such as rice, barley, oats, wheat, rye, sunflower, corn, cucumber, sugar cane, beans, beets and animal forage grasses all benefit from high levels of silicic acid in their cell tissues.

Improved yield...

For example, in a trial of sugar cane, applications of silica improved the sugar yield by 38%. Trials have also shown increased growth and yield in grain, legumes, small crops and tree crops.

Benefits in high Salinity areas...

Silica improves plant ability to survive and even thrive in high salinity areas.

Silica increases plant tolerance to frost & drought...

Silica strengthens plant cells which means less frost damage, more root growth and less water stress. (water loss and plant wilting are kept in check by cell walls thickened with a layer of silica gel).

Increases uptake of plant nutrients...

Silica improves plant photosynthesis and aids in the plant uptake of nitrogen, phosphorus, potassium, zinc and molybdenum.

Silica decreases toxicity...

Silica regulates plant uptake of iron, manganese and aluminum thus helping to reduce their toxic effects on plant growth.

Fungal disease & pests reduced...

Silica increases plant resistance to fungal disease and pest attack because of harder epidermal cells. Reduced brown spot, stem rot, powdery mildew and less caterpillar and aphid attack has resulted from the application of silica.

Improved colour and growth...

The depth of green colour in a crop is often attributed to the supply of Nitrogen to the plant.

Research has found that silica also plays a vital role and is essential for photosynthesis and chlorophyll formation (or green colour) in plant leaves.

Availability of Silica in your soil...

Silica is converted into plant available form (silicic acid) by soil microbes.

If soil is microbe deficient or over-limed the uptake of silica is reduced. Tests have shown that high organic matter in soil increases soluble silica while liming and the use of Nitrogen or Phosphate fertilizer lowers the soluble silica in soil.

Silica is not translocated in the plant...

This means that Silica must be supplied through the entire growth stage if its benefits are to be carried through to all parts of the plant.

Silica (and other nutrients) provided in water soluble form are subject to leaching and consequently may not provide ongoing, constant availability to plants.

Silica Sources...

Natra Min 25% Silica
Natra Min HI-Phos 22% Silica

Silicates are compounds of silicon plus oxygen with one or more metals. Natra Min supplies silica in many forms such as calcium silicate, potassium silicate, magnesium silicate etc.

Silica is broken down into silicic acid (soluble silica) by the action of soil microbes.

Constant release for optimum benefits...

In addition to high levels of silica, Natra Min and Natra Min HI-Phos supply a broad spectrum of mineral elements which will feed your soil, stimulate microbe and worm activity and result in a better uptake of the silica (and other elements) that are already present in your soil but not available to your plants.

When Natra Min is part of your farm management practices, your soil receives support at nutritional, structural and biological levels and this balanced approach is the key to your trees, crops or pastures thriving not just surviving. It is minerals which control the metabolism of cells in all living things.

Remember, the broad spectrum of all minerals as well as silica will give you the best results... **Phone now and find out how Natra Min can save you money on Lime, Gypsum and Fertilizer costs.**

Fertile soil can INCREASE your production and SAVE you money.

Phone us on 1800 81 57 57 for practical advice on how to restore balance to your soil.



Are Livestock Your Livelihood?

Mineral Balance for Optimum Health & Productivity...

Good animal husbandry tells us that an animals diet must contain the essential nutrients in appropriate amounts and ratios.

Minerals needed in relatively large amounts are called major or macro elements, and minerals required in small amounts are classified as micro, minor or trace minerals. However, these terms bear no relevance to the metabolic ranking or importance of any particular mineral in an animals dietary intake. **So a trace mineral can be just as vital to the health and performance of an animal as a major mineral.**

What Minerals are needed?

One principle applies to the nutritional requirements of all livestock - if adequate amounts of all minerals **but one** are fed, the lack of that particular mineral will limit performance. Even small imbalances or deficiencies can develop into reproductive, health, and production problems.

To fine tune your livestock's mineral uptake Ag Solutions Australia has developed **SUPERIOR MINERAL SUPPLEMENT**, a product formulated to ensure your stock receive the broad spectrum of natural minerals they require all year round.

Now Registered for Organic Use...

This specially formulated blend of minerals is derived from all natural sources with no chemicals used during processing. Registered for organic use, it is ideal for farmers and graziers interested in low / nil chemical production.

Complete Mineral Supply...

Every element needed by **dairy and beef cattle, horses, sheep, goats, and pigs** to stay in peak health is included. Soil mineral levels are easily depleted or tied up by extreme environmental conditions, over use of chemical fertiliser or over liming. It makes sense that your animals will look and perform better when they have access to a year-round supplement that supplies a balance of macro and micro mineral elements.

Every Element is Important...

SUPERIOR supplies the complete balance of natural minerals...

- ▶ Phosphorus
- ▶ Calcium
- ▶ Sulphur
- ▶ Magnesium
- ▶ Copper
- ▶ Silica
- ▶ Potassium
- ▶ Cobalt
- ▶ Zinc
- ▶ Selenium
- ▶ Iron
- ▶ Molybdenum
- ▶ Manganese
- ▶ Boron

... so that you benefit from higher production when your animals are in peak, healthy condition.

Your local Agent



BFA Certified
AI 437
for Organic Use



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NEXT ISSUE...

Phosphorus lock up...

We'll look at why so many farmers are experiencing **reduced results** from phosphatic type fertilizers...

...and how to release the phosphate from the "super" bank in your soil.

SUPERIOR improves the assimilation of fodder and grain...

Microbes in the rumen of the beast are the governing factor for the digestion of feed. Many farmers have reported changes in the color and smell of manure within days of introducing SUPERIOR Mineral Supplement. It's use in feedlots has also resulted in less smell and the manure breaking down much quicker.

This improved assimilation and utilization of fodder and grain is evidenced by improved weight gain in feed lots and increased milk production, butter fat and protein in dairy cattle. The use of Bentonite and Bicarbonate of Soda has been reduced or eliminated in dairy and feedlots.

Seeing the Benefits...

"Superior to other minerals!"



Gerry Logan of Ifanbut Limousin Stud, Kandanga has experienced first hand the difference that SUPERIOR can make. He introduced SUPERIOR to his grain mix and soon noticed that the manure was firm and broke down quickly and had very little ammonia smell. The color of animals became darker with increased shine being evident within weeks.

Then there was a problem... Gerry ordered another batch of grain from the local feed mill and within two days of using the new batch, all of his cattle scoured. He contacted his grain supplier and asked if they had included the SUPERIOR.

"The what?" was the answer. "No, we did not have any so we put other minerals in that will do the same job."

Gerry immediately added Superior to his grain and within three days the digestion problems were cleared up and manure was firm again.

Find out about the benefits of using Natra Min and Superior for yourself... and to get you started, take advantage of our special offer...

Special Offer
FOR EVERY 2 TONNE OF
NATRA MIN PURCHASED RECEIVE
ONE BAG SUPERIOR FREE

Offer valid for 2 months from receiving newsletter
Please mention offer when ordering