

Selenium Chip

Selenium Chip is a lime chip granule containing 10gm/kg (1%) of elemental selenium in the form of fast release sodium selenate.

Selenium Chip encapsulates selenium trace element in a safe polymer coating until moisture is present for release in the soil, which is then readily available for plant uptake. Many regions in New Zealand have soils with low selenium levels (<0.5 parts per million), including the vast majority of the South Island, the volcanic region of the central North Island and areas in Northland, Waikato, Manawatu and Wairarapa.



Selenium Trace Element:

Selenium is an essential trace element for all grazing livestock, with stock health and performance affected if selenium uptake is inadequate. While plants do not require selenium, they act as an important source of selenium for grazing animals. Selenium performs many important functions in livestock, playing a role in the immune and reproductive systems. Selenium is also involved in the correct functioning of the thyroid, which is essential for controlling the metabolic rate, heat production and growth of livestock. If selenium levels are deficient the improvement in stock health through supplementation can be dramatic, as illustrated by a trial at Tara Hills in 1983 showing an increase in lambing percentage from 21% to 120% after the application of selenium to pasture. Selenium can be supplemented through soil applied granules and or animal applied methods such as drenches, injections, vaccines and water dispensers. As a general rule, selenium granules are more economically beneficial when stocking rates exceed 3.5 units per hectare.

Measuring Selenium Levels:

Healthy, thriving livestock are a good sign of adequate selenium levels. Selenium deficiency can be measured in pasture through herbage analysis or in livestock through blood sampling or liver analysis.



Talk to your local seed supplier about Selenium Chip or phone us on 0800 805 505.

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Application: Selenium Chip should be applied annually to pasture or forage crops to protect against selenium deficiency in dairy cows, sheep, beef cattle and deer at a rate of 1kg/ha. It is best to apply Selenium Chip during periods of active plant growth in spring or autumn. The duration of protection may be lower in high rainfall areas or soils that are highly leachable. Selenium Chip can be applied in combination with fertiliser or as a separate application. Priority should be given to paddocks that will be carrying young stock. Selenium applied to the soil through a granule provides a safe method of application in terms of risk to animal health, with a safety margin of approximately 20 times before there is a risk to animals.



Trial Data: *Effect of Selenium Chip Application on Pasture Selenium Concentration*

This replicated field trial in Canterbury measured the selenium concentration in pasture herbage following the application of Selenium Chip at 1kg/ha in comparison to no supplementation. The application of Selenium Chip lifted the selenium concentration in the herbage above the deficiency level for up to 200 days.

(Trial conducted by PGG Wrightson Seeds).

