



Know Your Stuff With Dr Will Talbot

Selenium – What is SelPrill Double?

In the past, some areas of NZ were productive and grew grass well, but stock didn't thrive. Why was that? The culprit in some areas were trace element deficiencies, with selenium being one of those trace elements.

Key Points

- New Zealand soils have very low natural selenium (Se) levels.
- Selenium is essential for animal health but not for plant growth.
- Selenium deficiency can result in poor stock performance (e.g., ill thrift, poor fertility, white muscle disease).
- Increasing plant Se levels is an effective way of ensuring your livestock are not Se deficient.
- You can fix Se deficiency by applying 0.5 kg SelPrill Double/ha/yr to pastures and subsequently grazing stock on those pastures.

What Does Selenium Do?

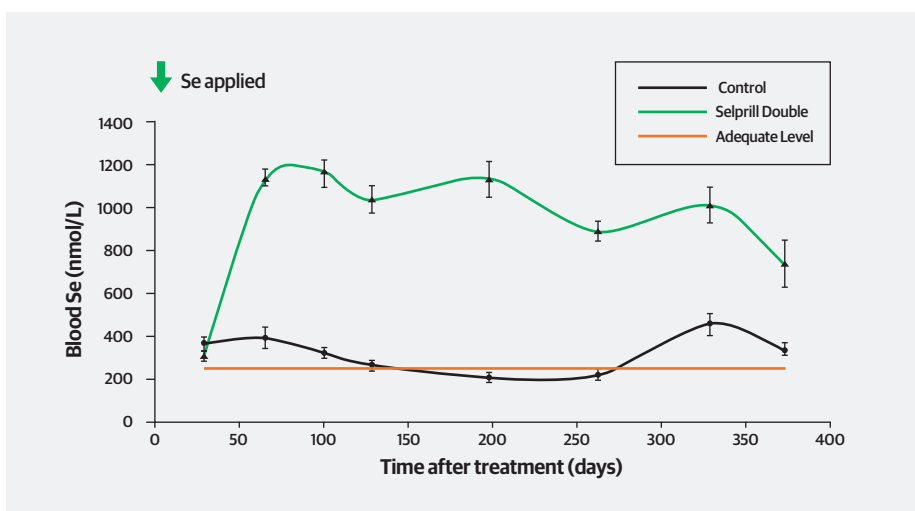
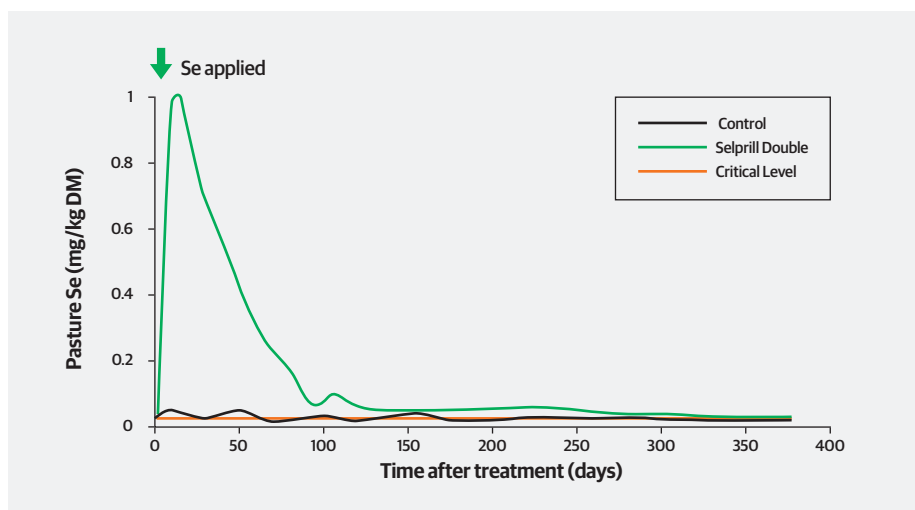
Selenium is not required for plant growth, but it is essential for animal health. It plays a crucial role in maintaining the integrity of cell membranes, thyroid activity, and immune responses. A deficiency can result in ill thrift, poor fertility, loss of production, and white muscle disease.

How to Diagnose a Selenium Deficiency

Herbage testing actively growing pasture can provide insight into pasture Se (and other micronutrient) levels. If herbage samples show less than 0.03 mg Se/kg DM, it is worth testing animals for Se deficiency through blood and liver tests.

How to Fix a Selenium Deficiency

To address Se deficiency, apply 0.5 kg SelPrill Double per hectare per year to pastures. This application causes a significant spike in pasture Se levels for 1-3 months. As your stock graze on this pasture, they will ingest Se and store the excess in their tissues as selenoamino acids, providing protection for up to 12 months. Examples of pasture Se levels and animal blood Se levels after top-dressing with SelPrill Double are shown here.



Ensure your stock graze on this high Se pasture. Ideally, top-dress most of the farm with SelPrill Double to ensure all animals receive high Se pasture. If only part of the farm is top-dressed, regularly graze stock on the high Se pastures in the months following application to maintain effectiveness.

Spring applications of SelPrill Double are ideal, but autumn applications also work well. Apply earlier in autumn to allow for multiple grazings of the high Se

pasture before winter.

Other alternatives to treat Se deficiency include long-lasting injections or boluses. When deciding on a treatment, consider the practicalities and costs for your system. Use only one solution at the recommended rates to avoid issues with excess Se intake, which can be toxic, and to ensure cost-effectiveness. Se toxicity is not a concern when applying one solution at the recommended rates.

Want to know more?
Contact your local Agri-Manager or call our
Customer Centre team on 0800 100 123.


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