Know Your Stuff With Dr Will Talbot

Molybdenum – Boost Your Clover Growth!

Why Molybdenum Matters

Molybdenum (Mo) is essential for healthy clover growth. It plays a key role in the enzymes that help clovers fix nitrogen (N) to the roots of the plant from the atmosphere and convert it into amino acids and proteins. **With the new 190 N cap in dairy, biological nitrogen fixation by legumes has become even more important.**

Common Deficiency

Around 12% of lab samples show Mo deficiency. To check your pasture, take a clover-only sample in late spring or summer when clovers are actively growing.

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Signs of Mo Deficiency

If your Mo levels are below 0.1 mg/kg DM and your N% is under 4.5%, your clover is likely suffering from Mo deficiency. Regular herbage testing is the best way to manage Mo levels effectively.

Mo is critical for two plant enzymes

Nitrogenase (which aids nitrogen fixation) and nitrate reductase (which converts nitrate to amino acids and proteins).

Both are involved in plant nitrogen cycling, meaning Mo deficiency symptoms are similar to nitrogen deficiency.

These include:

- Stunted growth
- Pale green leaves
- Withered leaves (in severe cases)

Soil pH Interaction

Mo availability in soil increases as soil pH rises, provided your soil contains Mo. Liming your soil to a pH of 5.8-6.0 can help ensure Mo availability isn't limited.

Copper Deficiency in Livestock

High Mo levels in pasture (above 2 ppm) can interfere with copper absorption in livestock, leading to copper deficiency. However, this issue can be avoided if Mo levels are properly managed through herbage testing and correct application.

Application Tips

- Test clover samples before applying Mo to avoid excess.
- Apply 1-2 kg of SupaMoly (2%) per hectare to correct Mo deficiency and boost clover growth.

Ensure your clovers thrive by managing Mo levels effectively! Want to know more? Contact your local Agri Manager or our Customer Centre on 0800 100 123.

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