

Selenium in Grass:

Overview

- UK soils are amongst the lowest in the world for Se
- 90% of the soils in UK are low in Se
- This impacts Se levels in grass and silage

Selenium in livestock

- Se works with vitamin E as anti-oxidant to protect tissue and red blood cells)
- It aids fertility and auto-immunity
- Seleno-proteins are vital for stress resistance

Deficiency symptoms:

- Ill thrift
- Retained placenta
- Muscular dystrophy (WMD)
- Low weight gain
- Low lambing %
- Infertility



Selenium deficiency in grass

Silage only provides c15-20% of dietary Se cattle requirements (T & J labs data from silage analysis). We are therefore relying on Se intervention for 80-85% of the dietary needs

Treatments:

Boluses, Se in water, injections, minerals / licks are all ways to supplement Selenium as well as through fertiliser application. There is no real build up of Se in the soil as it is exported off the farm in meat, milk, wool and carcasses.

Cork Selenium Trial 2013-2015

This three year study tracked the levels of Se in grass, silage and blood of the cattle . It showed that after fertiliser application with Se included the grass Se level increased and was mirrored in the blood levels recorded afterward. Similarly when the silage was fed, keeping the blood Se levels above the recommended levels.

Conclusion

Selenium is vital for animal health and one good way to provide it is through the grass which all stock will eat through grazing and silage and is cost-efficient.

Data provided by Origin Fertilisers