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## TRACE-EL BOOSTS SILAGE/BALEAGE MINERAL LEVELS

The benefits of mineral supplementation are well known throughout New Zealand. Trace element limitations to farm performance go well beyond the classic cases such as cobalt deficiency causing "bush sickness" and selenium deficiency causing "white muscle disease". Low levels of trace elements can affect all aspects of stock performance and health. Low levels can be the result of low availability in the soil or unfavourable interactions with other elements.

A good way of addressing trace element levels is spraying on Mainland Minerals Trace-El (containing a blend of trace elements) either onto the pasture to be grazed or onto silage/baleage prior to wrapping/ensiling. Both approaches help reduce normal seasonal fluctuations of trace element levels and boost mineral uptake by stock. This eliminates the need for direct animal supplementation. Trace-El can also be applied to silage/baleage just prior to being fed out.

Trace-El is produced in a number of formulations but is particularly suited to deer, pre-tupping in sheep and for lambs. In the example below, Trace-El Deer was applied to wilted pasture in the field, which was then made into both silage and baleage. The trace element levels of the Trace-El treated products were then compared with levels in existing 18 month old silage which had not received Trace-El treatment. This acted as a control (trace element levels in silage do not change significantly over time).

TRACE	CONTROL	SILAGE	BALEAGE	DESIRED	COMMENT
ELEMENT				LEVEL	
Zn	23	41	50	30-50	Good
Cu	10	35	20	8-15	Very Good
В	11	15	21	8-15	Very Good
Со	0.24	3.16	2.94	0.08-0.15	Excellent
Se	0.05	0.73	0.40	0.05-0.15	Excellent
Ι	0.21	0.45	0.21	0.4-0.80	Variable

The results show that zinc, copper, boron, cobalt, selenium and iodine levels all increased in the Trace-El treated silage, demonstrating that Trace-El Deer applied to silage is able to supply the mineral requirements of deer. Trace element levels in the baleage in this trial were slightly lower on average than in the silage, although zinc and boron were better. Other results (see table) often demonstrate better levels in baleage.

Opti-Health results regularly confirm the same benefits provided by Trace-El products. Many farmers using Trace-El have do not require any other trace element supplementation products.

For more information on Mainland Minerals Trace-El products call Mainland Minerals on 0800 433 787.