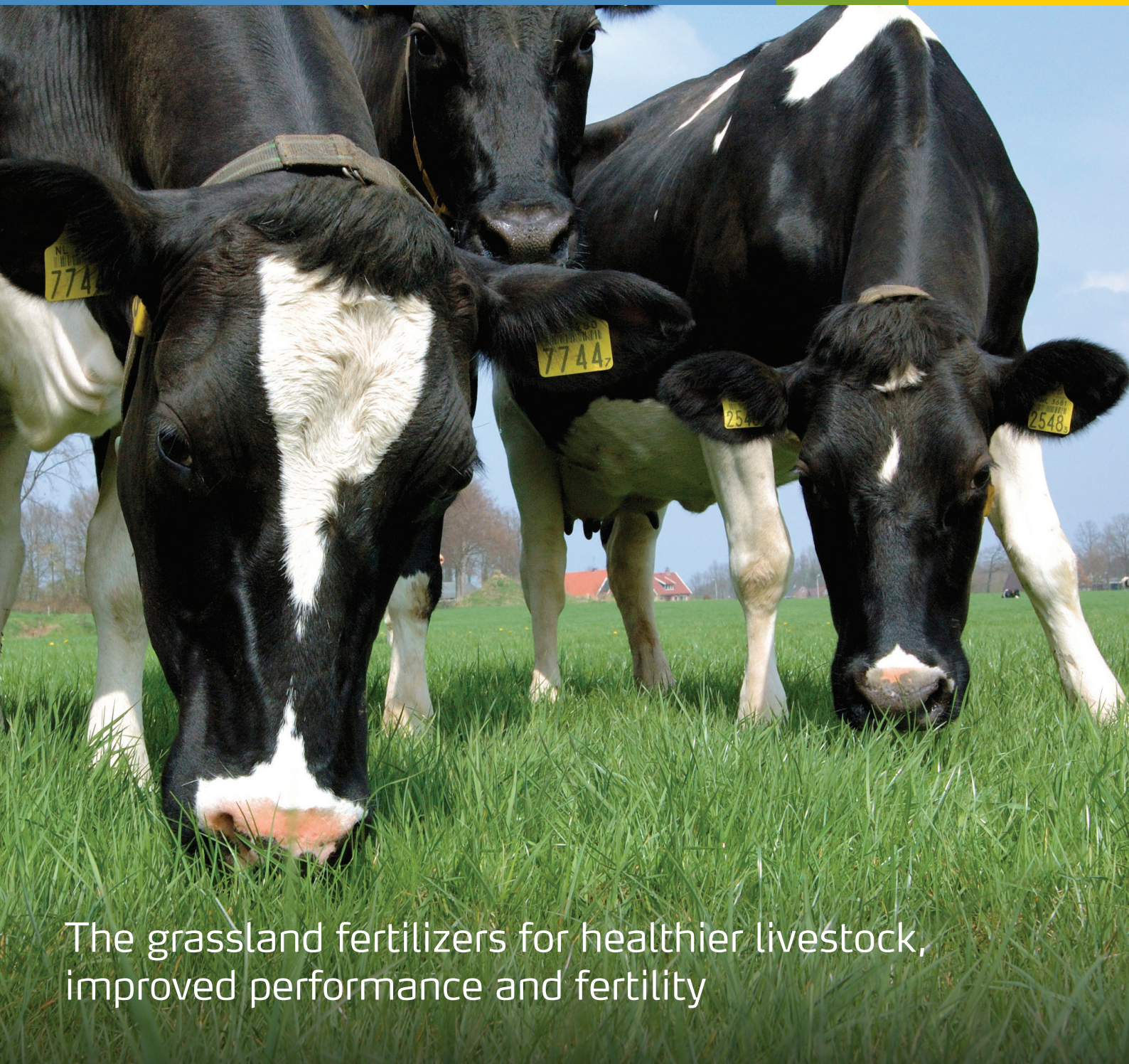




Knowledge grows

The Booster Range



The grassland fertilizers for healthier livestock,
improved performance and fertility

The Problem

Is your grass supplying enough selenium ?

Selenium

- Selenium is an essential trace element for all animals and humans.
- Selenium deficiency occurs at herbage concentrations below 0.1 mg/kg DM.
- Deficiency in livestock causes stillbirth and retention of afterbirth, increase milk cell count and increased levels of clinical mastitis.
- In calves, deficiency is associated with “white muscle disease” (nutritional myopathies). In lambs and calves under six months, local myopathies may involve either skeletal or cardiac muscle.
- Increased selenium levels in the blood of sheep resulted in a significant increase in live weight gain and wool production.
- Applying selenium in grassland fertilizer increases selenium uptake by the grass and therefore increases the availability of selenium to animals.

The Solution

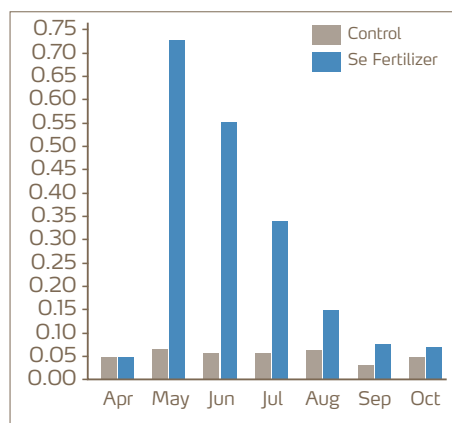
Have you considered enriching your grass with selenium containing fertilizer?

Effect of selenium fertilizer on Se content of herbage for silage in mg/kg dry matter

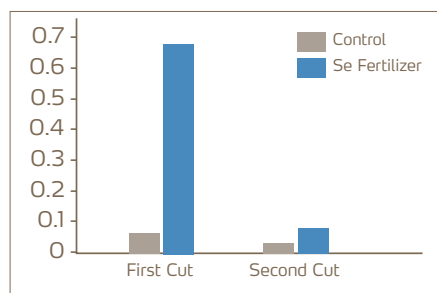
The selenium fertilizer in the trial was applied in one application in April and resulted in significant increased selenium concentration in grass/silage with subsequent increased blood levels for the duration of the season. There was some fall off in herbage concentration over the season indicating the wisdom of repeated applications of selenium with a fertilizer from the Booster Range.

In mildly selenium deficient soils, repeated applications will lead to an improvement in the general overall health and well-being of the animal.

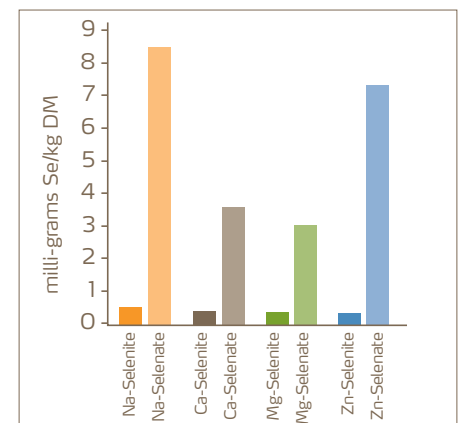
Effect of selenium fertilizer on Se content of herbage in mg/kg DM



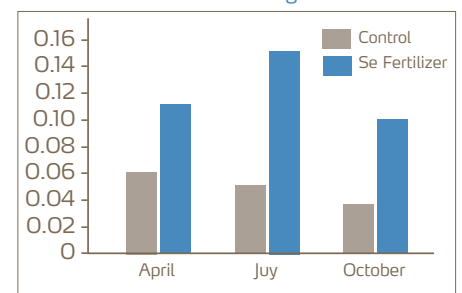
Applying selenium in grassland fertilizer increases selenium uptake by the grass and therefore increases the availability of selenium to animals.









The Booster Range contains selenium in the selenate form as this gives the greatest fortification









Effect of selenium fertilizer on Se concentration in blood in mg/l



Grazing Fertilizer Programme including selenium

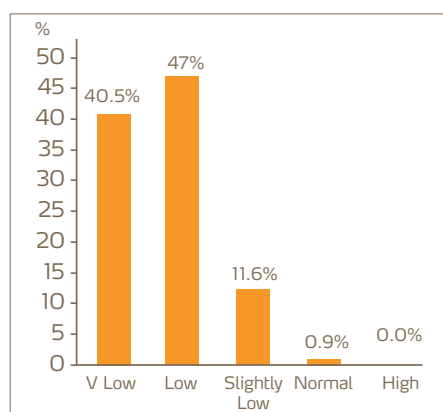
						
	Feb/Mar	April	May	June	July	August
YaraMila™	STOCK BOOSTER 145 kg/ha		STOCK BOOSTER 200 kg/ha		STOCK BOOSTER 135kg/ha	
YaraBela™		NUTRI BOOSTER 240 kg/ha		NUTRI BOOSTER 135 kg/ha		NUTRI BOOSTER 100 kg/ha

Silage Fertilizer Programme including selenium

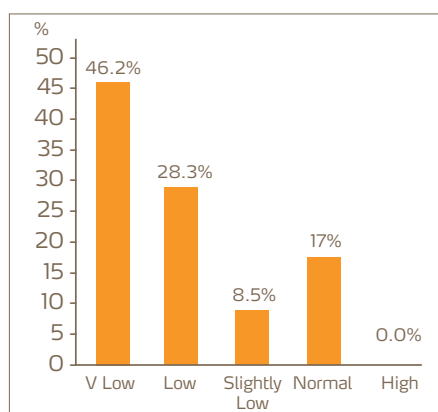
						
	Feb/Mar	April	May	June	July	August
YaraMila™	SILAGE BOOSTER 650 kg/ha		SILAGE BOOSTER 600 kg/ha		SILAGE BOOSTER 425kg/ha	

88% of soils and 83% of grass samples are low or very low in Selenium

UK Grassland soil selenium status 2015

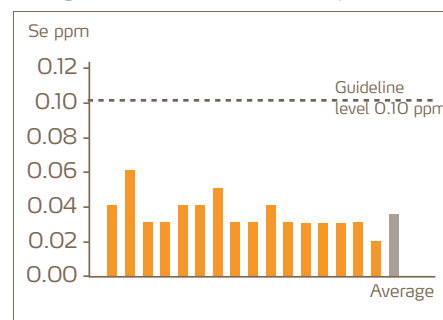


UK Grassland leaf selenium status 2014



All the grass samples in the Yara Grass Prix competition were below the 0.1 ppm guideline.

Selenium levels in all samples collected during 2014 Yara Grass Prix competition



The Benefits

Make every 'bite' count and see the benefits in your herds health?

Increased herd health

The effect of selenium on herd health

	Selenium deficient cows	Cows with selenium supplied
Cows with mastitis	22	12
Cows treated for mastitis	32	17
Cows with fertility problems	41	19

From the above table the cost would drop from £9,600 to £5,700, a £3,900 saving.

From the herd in the above table this would drop from £7,380 to £3,420, a saving of £3,960.

The cost of mastitis

AHDB Dairy have calculated that "Economic losses from mastitis range from lost milk quality bonuses to quality penalties for high cell count milk from milk buyers to the costs associated from treating mastitis and having to throw away un-saleable milk. The cost of treating a case of mastitis averages £250-£300, varying from around £60 to treat a mild case of mastitis to the cost of the loss of a cow following a severe case of mastitis."

The cost of herd fertility

On average, the herd infertility cost for a 100-cow herd based on projected calving intervals and the cost of replacing cows potentially culled for infertility was estimated at about £18,000. This ranged from around £6,500 in the top 25 per cent of herds to almost £38,000 in the bottom 25 per cent of herds." (David Mackey, CARFRE/AFBI Fertility Benchmarking Online)



The Booster Range from Yara



YaraBela™ NUTRI BOOSTER (25% N + 5% SO₃ + Na + Se)

is a unique fertilizer for use on grass. This fertilizer which is based on CAN as the nitrogen source offers the farmer the option of applying nitrogen and sulphur coupled with selenium which has proven health benefits for breeding stock and sodium which increases grass intake and animal performance.



YaraMila™ STOCK BOOSTER (25-5-5 + Na + Se)

is a compound prilled NPK fertilizer containing sodium and selenium for use on grassland to supplement selenium levels.

Selenium is vital to the fertility in most mammals and prevents issues such as placental retention, increased white cell counts and white muscle disease. Sodium aids the uptake of selenium into the grass.



YaraMila™ SILAGE BOOSTER (20-4.5-14.5 + 7.5% SO₃ + Se)

is a compound granular NPK fertilizer containing selenium for use on grassland to supplement selenium levels.

Selenium is vital to the fertility in most mammals and prevents issues such as placental retention, increased white cell counts and white muscle disease.

