

### GROMOR JUNE 2017 NEWSLETTER

Beautiful green forage that looks highly palatable and yet livestock nibble reluctantly!

Why? Provided you've checked with your seed supplier, it is highly unlikely to be due to the forage crop variety. The cause is invariably soil condition.

What soil conditions affect palatability?

- a) Soil Acidity. You may have tested soil acidity some time back and found it to be fine, so surely it could not have changed! Well it could, particularly if high nitrogen levels have been applied. High nitrogen applications (>300kg LAN or 175kg Urea/ha/crop) and allowing soil organic matter to drop below 2,5% will increase soil acidity. Aim to keep ACID SATURATION UNDER 10.
- b) Also if soil organic matter has been allowed to drop. You may ask how soil organic matter can drop with a forage crop planted. Well it can, particularly if hay or silage are made from it and also if it gets burned from time to time.
- c) Nutrient imbalances. In addition to NITROGEN EXCESS, POTASSIUM EXCESS also makes forage unpalatable.

What potassium level to apply, differs vastly on lands where forage is cut and used for hay or silage, compared to that which is grazed.

Removing forage, removes a lot of potassium, whereas grazing, returns the bulk of it via dung.

- d) Perennial pastures also often fail when established on croplands that have previously been poorly fertilized and managed, incorporating annual tillage, particularly when the soil is dry.

### FOR THE GARDENER

If clippings are removed when mowing your lawn treat it like a hayland and rather use a high potassium fertilizer like GROMOR 2.3.4(30) or GROMOR 5.1.5(28) than GROMOR 4.1.1(21), LAN or UREA.

### MICROBIAL BIO FERTILIZERS

Situated in every cell wall are transmembrane proteins which serve as portals that allow mineral elements to gain entry into the plant cells. With the concentration of elements in the soil up to 10 000 times lower than that in the plant cells, how does nature overcome the laws of physics to move elements from a lower concentration, into a higher concentration inside the plant? It's an organic Bio-fertilization process with ATP (adenosine tri-phosphate) as the driver.

The only source of ATP outside of the plant, emanates from root colonisation by specialised microbes such as those found in Microbial Solution bio-fertilizers.

I cannot take credit for this piece – it comes largely from a Microbial Solutions pamphlet.

## **BULBS**

Bulbs are a relatively simple way to lend colour to your garden. It's still time to get in your spring flowering bulbs.

The bulbs you could consider planting now are: -

Anemone, Daffodils, Dutch Iris, Freesias, Hyacinths, Narcissus Ranunculus and Watsonias.

Don't forget to apply and dig in GROMOR COMPOST at 1 x 30dm<sup>3</sup> bag/5m<sup>2</sup> to 10m<sup>2</sup> and GROMOR ACCELERATOR PELLETS at 150g/m<sup>2</sup> of bed.

## **EFFECT OF INORGANIC (CHEMICAL) FERTILIZERS ON SOIL BIOLOGY**

Whilst there is no shortage of opinion on the negative effect of CHEMICAL FERTILIZERS on SOIL BIOLOGY and SOIL ORGANIC MICRO FLORA, these opinions are not supported by scientific research. In fact, exactly the opposite provided fertilizers are used at rates commensurate with crop requirements. After 130 years at Rothamsted Research Station, biomass carbon (C x 1,7 represents soil organic matter which sustains soil biology) had settled at 128 µgCg<sup>-1</sup> with NO fertilizer applications and 189 µgCg<sup>-1</sup> with annual applications of N, P, K, Mg and Na, with earthworm numbers and biomass having increased in proportion to the amount of fertilizer applied annually – similar findings have been found in New Zealand (Neil Miles, Cedara Agric Soil Lab).

## **GROMOR MOVING**

After 48 years at the CATO RIDGE site, GROMOR is planning to move by the 30<sup>th</sup> of June 2017.

(PS: The 2017!!)

From Durban to Pietermaritzburg on the N3, 3,1km past Camperdown glide off left on the "61" R603/R56 off-ramp. Follow the R56 Richmond/Thornville Road for ±1,8km to GROMOR's new premises on the left side of the road.

From Pietermaritzburg glide off 3,1km before Camperdown on "61" R56/R603 known as the Umbumbulu Road and follow the directions above.

DON'T expect to identify us by enormous heaps of compost or chicken litter!

Regards,

**GROMOR (PTY) LTD**

## **R. HAGEN**

PS: Church humour

A minister notices a small boy from the local farming community in the entrance hall of the church, staring at the memorial plaque on the wall. The minister goes up to the boy and says, "Good morning, son." "Good morning, Father," the boy replies, but he can't keep his eyes away from the plaque. "Father, what is this?" The minister answers, "Well, my son, it's a memorial plaque for all the young men who died in service." In silence they stand next to each other staring at the plaque until an almost inaudible, quivering little voice says, "Which service, Father? The morning or the evening service?"