

GROMOR JUNE 2016 NEWSLETTER

With the increase in intensive growing, Fusarium and other plant diseases have come to the fore.

Whilst the instinctive reaction is to reach for the fungicide, maybe it's time to ask; "why the outbreak?" There is evidence that a lot more care should be taken with fertilization, in order to make plant cells stronger and better able to withstand disease attacks.

Firstly, look at the soil pH. Between a pH of 5,6 and 6,4 all nutrients appear to be freely available. Outside this range, deficiency symptoms can readily occur.

Iron, manganese, copper and zinc are typical examples when pH rises above 6,4 whilst under 5,6 phosphorus, calcium, magnesium and molybdenum are prone to deficiencies.

If plants cannot take up elements because of an unfavourable pH, growth will be jeopardised and the chances of disease infection greatly increased.

Adequate potassium is a very important element in disease prevention and being soluble and thus readily leached, shortages can occur quickly. This, if combined with excessive nitrogen (especially ammonia), leaves the plant cells weak and prone to fungal attack, particularly under dry conditions.

Without getting too technical, I would advise that when growing intensively, never to apply nitrogen without potassium. Where soil phosphorus and pH levels are within the required range, plant with GROMOR 5.1.5* at 50g/m² for spring or autumn plantings.

To underline these points on potassium fertilization, I quote from Nutrition Rules by Graeme Sait in conversation with Bruce Tainio, whom he describes as an inspirational consultant, who strongly believes that we need an alternative, to current exclusive inorganic or organic practices and to make the sole goal, the production of nutritious food.

Bruce has the following to say about potassium:

"It's going to change your whole impression of the importance of potassium when you realise that what you thought was sufficient, will often be deficient. Potassium to me is the most underrated element in agriculture" Potassium deficiencies are particularly prone to presenting themselves under cold and dry conditions where excess nitrogen has been applied.

NB: There may be potassium available, which the plant battles to take up sufficient of under these conditions.

Under agricultural conditions check the following

1. Soil pH. If pH falls outside the 5,6 to 6,4 range; take action. The most common problem is acidity. If the pH is under 5,6 apply Dolomitic Lime at 3 tons/ha and work in as deeply as possible.
2. If Soil Organic Matter (C x 1,7) drops below 2,5 make plans to increase it through planting leys, no-till, applying compost, manure, litter etc.
3. If soil pH is within the 5,6 to 6,4 range and P is adequate, plant with 5.1.5* – 300kg/ha (30g/m²). 5.1.5 can also be used for topdressing at 150kg/ha (15g/m²) or if you're growing a particularly high value crop, topdress with 150kg POTASSIUM NITRATE/ha (15g/m²). It is expensive, but is an excellent source of both nitrogen and potassium!

The NITROGEN in the STANDARD 5.1.5 (36) is in the UREA form, which soil microbes convert to AMMONIA and then NITRATE, which is the form that plants use.

GROMOR'S CUSTOM BLEND 5.1.5 (28)* has the NITROGEN in the LAN form, with the bulk of its NITROGEN as NITRATE. There is an additional "curved ball" that GROMOR'S CUSTOM BLEND 5.1.5 (28)* eliminates. A number of growers, particularly those inclined in the ORGANIC direction, feel that the CHLORIDE in the POTASSIUM CHLORIDE used to make the 5.1.5 (36), may kill essential soil microbes. This is eliminated with 5.1.5 (26)* which uses POTASSIUM SULPHATE for POTASSIUM. In this way it also supplies the plant nutrient SULPHUR, which is showing increasing soil deficiency symptoms.

SEEDLINGS

Up to the 1970's Seedling production was in limbo. To GROMOR having already entrenched themselves with "Tunnel" farmers growing cucumbers and tomatoes, the call came for a Seedlingmix. Fortunately, Irwin Smith from the University was also interested in this and suggested we compost pinebark, as overseas it had shown itself more stable than sawdust for growing "plugs" in trays.

Once composted, we screened the pinebark into different particle sizes and together with trials by Irwin and some of the earlier seedling growers (Dave Biggs comes to mind), "quarter inch" bark, mixed with a carefully monitored fertilizer charge, containing all the macro and micro elements required for growth, was the most successful.

We soon discovered that this fertilizer charge could not carry the seedlings right through to planting out the "plugs". It was then that we formulated GROMOR 3.1.3 (37) ws complete, which was to be watered on with a weekly irrigation. Dilution 1g GROMOR 3.1.3 (37) ws complete in 1ℓ water.

Whilst GROMOR QUARTER INCH BARK is still widely used, there are times when it doesn't form the required "plug". Often it is in very hot periods where irrigation, combined with feeding cannot cope. Remember that every watering should have 20% leaching to prevent an EC build up in the plugs.

If you have continued using GROMOR QUARTER INCH BARK out of habit for growing seedlings, I suggest you try GROMOR SEEDLINGMIX. It does cost a little more, but is a superior product for seedling production.

GETTING OLD!!

I've reached a very exciting stage in life, meeting new people and going to new places that I'm told I've known for and been going to regularly for the last 50 years! But it's not only me. From Denene Erasmus's editorial, Farmers Weekly of 22 April 2016, I was really surprised to learn that the average age of farmers in the RSA is 62 years (maybe older). Furthermore, according to the International Food and Agribusiness Management Association, in the USA it is 58 years, Japan 67 and in Europe more than a third of farmers is older than 65 years. Farming is not attractive to young people in Africa, Europe or the Developed East!

I'm told that agriculture in the old homelands has all but died!

How on earth are we going to feed our growing population which is expected to reach 63 million by year 2050? One thing is for absolute sure, we won't do it without GM Seed and better water conservation!!

IGA SYMPOSIUM: The next IGA symposium will be held at the DURBAN BOTANICAL GARDENS on 21 July 2016. For further information, e-mail Marieke Mendes at Marieke.Mendes@dubetradeport.co.za.

Regards,

GROMOR (PTY) LTD

R. HAGEN

PS: The wife, having reconciled herself to the situation, was sitting calmly at her husband's death bed. They had 4 children; the older 3, were beautiful blondes with blue eyes and fair skin, whilst the youngest, was dark skinned and had freckles.

Very close to the end, the husband says "There is something that I've been wanting to ask you for a long time, but somehow couldn't get myself to do it. "Am I the father of our youngest?" To this his wife quietly and with confidence replies... "Yes my darling, with which he contently passes away."

As the wife walks out the door she heaves a big sigh of relief and says to herself: "Phew, thank goodness he didn't ask about the older 3.