

June 2023 Newsletter



This month's newsletter deals with two topics:

- The treatment of bare areas.
- Using Kelp as an organic fertilizer.

1. BARE AREAS

Bare areas on the green may occur for a number of reasons:

- Scalping.
- Depleted carbohydrate reserves in the grass plant.
- Covering the green with top dressing after renovation or levelling.

The initial reaction of the grass plant is survival. The main objective of the plant is to produce new leaves to find sunlight to enable the photosynthesis process to recommence. It will do this by growing vertically, rather than its usual growing pattern of approximately 20% vertical growth and 80% horizontal growth.

This initial vertical growth is wholly dependent on the carbohydrates stored in the primary bud and roots.

Once photosynthesis is possible, the grass plant will start to produce carbohydrates to enable it to grow normally. Provided the new leaf is not cut, the horizontal growth will commence.

It should be noted that different varieties of grass start their horizontal growth at differing heights. Therefore, it is important to keep a close eye on the initial vertical growth, and not start cutting again until the horizontal growth has commenced, ensuring that the mowing process does not interfere with or damage that horizontal growth.

It is possible to stimulate this horizontal growth, a process known as tillering, by cutting the grass once only, as soon it has reached a height of at least 10 mm.

During this initial regeneration process, it is important not to give the new growth too much nitrogen, which if used on its own will encourage the grass plant to grow vertically at the expense of the much-needed horizontal growth.

It would be best to use a fertilizer that is low in nitrogen, rich in potassium and minimal in phosphates, i.e., a 3.1.5. Adding a small amount of molasses or kelp will provide an instant source of carbohydrates to the grass roots.

2. USING KELP AS A FERTILIZER

Kelp is a totally organic product, found in the ocean as a form of seaweed. It is naturally rich in nitrogen, phosphorous, sulphur and potassium. Used as a fertilizer it strengthens the soil with these much-needed nutrients, and will help the grass plant to become healthier and stronger.

Kelp will also help boost the capacity of the grass plant to withstand colder periods, and it helps protect the grass plant from disease and attacks from infectious insects.

Kelp can come in a number of formats:

- Kelp meal, used to condition the soil.
- Kelp powder, used as a fertilizer once mixed with water.

Similar to Molasses, Kelp will improve the sugar content of the grass plant.

Once the grass plants have developed roots, Kelp fertilizer will help the necessary mineral uptake into the leaves, and help the plant to live longer.

The application of Kelp has an additional benefit in that its high carbohydrate content and other micro nutrients nourishes the micro-organisms found in the soil. These micro-organisms improve the soil quality by allowing the soil to hold more water.

In addition to protecting the grass plant from disease, Kelp also plays an active role in breaking down Organic Material, allowing a further release of nutrients into the soil.

One immediate benefit of Kelp is that it releases plant growth hormones such as auxins, cytokinins and gibberellins. These plant growth hormones, which are only required in small quantities, are essential for cell division and elongation, which are the basics of the plant growth function.

The application of Kelp meal helps condition the soil, as it stimulates the naturally occurring soil algae, bacteria and fungi so necessary for the grass plant to take in the necessary nutrients required for healthy growth. A good soil structure improves aeration, water retention and makes the soil more workable.

Thus, continued application of Kelp meal will help replace the extracted nutrients, ensuring that the soil remains fertile and retains its ideal structure.

Since Kelp has a high concentration of Organic Material, it is a valuable addition to any fertilizer mix.

Kelp is a useful product when treating bare or weak areas on the green, as it supplies its own carbohydrates rather than using those being produced by the emerging grass plant, thereby ensuring that the new grass has the best possible chance to develop and grow healthily.

ACKNOWLEDGEMENT

We would like to thank Dr. Charles Louw for his advice in preparing this newsletter.