

**GREENMASTER®**

# Blade

A brand new and totally unique turf bio stimulant



- **Invigorates soil nutrient re-cycling**
- **Stimulates root dwelling microbes, which leads to better pest and disease resistance, improved nutrient uptake and secretion of growth compounds**
- **Aids soil aggregation**
- **Provides a direct supply of nutrients to stimulate foliar health**

For many years Scotts has been developing and trialling biological products for use on turf in conjunction with independent authorities. The result of this development work is 'Scotts Greenmaster Blade'. Greenmaster Blade is a totally new generation supplement for your turf. Based on the advanced and proven science of carbohydrate and seaweed nutrition, it works with nature to stimulate a healthier and more vigorous root zone by injecting new life into the soil.

The benefits to turf during independent trial work and user trials have been outstanding. When used within an overall turf maintenance programme Greenmaster Blade has shown increased grass sward density, vigour and general improved turf health. Root mass was significantly increased as was soil micro flora, especially beneficial indigenous mycorrhiza.

Greenmaster Blade comes with an unequalled amount of research carried out by independent research agencies and world recognised experts like Dr. A. Gange of Royal Holloway College.

### Where Technology meets Nature

- **Improved and healthier root structure**

The heart of Greenmaster Blade's performance lies in its beneficial effects on root growth. During trials, users reported improved rooting down to a depth of 200-250mm. This is because it stimulates the activity of natural soil micro-organisms, increasing the breakdown of soil organic matter and providing a rapid and sustained supply of nutrients.

- **A thicker and more durable surface**

One of the key benefits of an improved root structure is greater access to soil nutrients. So aerial growth is healthier and harder wearing, and fine grasses can be sustained even at the height of the tournament season.

- **Rapid and sustained green-up**

By accelerating the supply of nutrients, Greenmaster Blade improves the health of every cell. They become greener and more dense, yet there is no excess flush of foliar growth.

- **Less damage from drought**

Deeper and stronger rooting goes hand in

## Blade

Application rate:  
25-50 litres in 200 litres water

Area treated by a 10 litre bottle:  
2,000-4,000sq. m

Suggested use period

|     |     |     |     |     |     |     |     |     |     |     |     |
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| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
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hand with improved resistance to drought. Soil moisture is more accessible, and your turf maintains its good looks for longer.

- **Improved disease resistance**

Improving your turf's health means it is better able to stave off attacks from disease and infection – potentially reducing costly chemical treatments.

- **Black Layer and Thatch reductions**

Greenmaster Blade promotes the activity of the micro-organisms that can break down black layer and thatch, and releases nutrients back to your turf, in conjunction with an appropriate aeration programme.

- **Safety and environmental good sense**

Because Greenmaster Blade is based on natural ingredients, it is kind to the environment and can be used with confidence on all commercial species of grass.

### How Blade works

The top few inches of soil are teeming with life. Beneficial micro-organisms re-cycle decaying organic matter to release a drip-feed of nutrients into the soil. Modern-day pressure on turf can create a near-sterile environment under which microbial activity is suppressed and the rate of this natural recycling can be slow.

#### Unlock the potential

Greenmaster Blade unlocks this potential. A carefully-engineered spray of carbohydrates, seaweed and micronutrients, Greenmaster Blade works by providing beneficial micro-organisms with a readily-available energy source to re-invigorate their activity.

The result is an acceleration of natural mulching and composting, a breakdown of

black layer and excess thatch, and a direct supply of nutrients to your turf's roots.

**Mycorrhiza fungi**

As well as supplementing free-living micro-organisms in the soil, Greenmaster Blade has been proven through research to stimulate the activity of other beneficial micro-organisms – mycorrhiza fungi. These fungi are essential for healthy grass plant growth and research has shown that they have a beneficial synergistic effect on fine turf plants such as fescue and bent grass species.

Occupying the outer surface of the root (the rhizosphere) these fungi actually encourage turf grasses to grow. As well as breaking down complex organic molecules, they improve the uptake of nitrates and phosphate by roots; protect against disease-causing pathogens; and provide a supply of amino acids and vitamins. Interestingly, they have also been shown to release hormone-like compounds that enhance plant growth.

So, by encouraging these fungi with Greenmaster Blade, your turf has higher levels of natural disease resistance, grows stronger and healthier, and is better able to withstand intensive play.

**Soil aggregates and direct nutrition**

On top of this, micro-organisms help improve soil structure by binding soil particles together. Greenmaster Blade aids this to enhance root penetration, and improve aeration and drainage. It is also absorbed directly through the leaf within hours, turf colour and texture can be rapidly improved.

**Programmed approach**

Scotts know that to manage turf effectively many different jobs have to be carried out. Maintenance work such as aeration, topdressing, scarification etc. is vitally important and is essential for the creation of healthy turf grass. Greenmaster Blade does not replace any of these important treatments. It is a part of the overall turf maintenance programme that helps to improve rootzone and turf quality.

**How to use**

Using Greenmaster Blade is simplicity itself. An easy to-use liquid spray, it requires only conventional equipment.

It is applied in a water volume of 200 litres/hectare.

The product has been extensively tried and tested to establish the recommended application.

For best results, applications should be watered in to achieve thorough soil penetration. This programme should be used in addition to your usual fertiliser programme. Do not use Greenmaster Blade in a dilution of less than 3 parts water to 1 part Greenmaster Blade.

Only apply Greenmaster Blade in good

growing conditions. When soil temperatures are below 10°C, visible improvement may take a while to appear. If nutrient imbalance is apparent from a Scotts soil test, it is recommended that the lacking nutrient also be applied in conjunction with Greenmaster Blade.

If turf is drought-stressed and irrigation is limited, delay applying application until there is adequate available moisture. Soils with high cation exchange capacity of organic matter must be treated in an integrated programme.



|                       | 1st Application   | 2nd, 3rd, 4th Application   |
|-----------------------|---|---|
| <b>Overseeding</b>    | 45 litres/ha in 200 litres water<br>5-14 days after sowing              | 25 litres/ha in 200 litres water<br>20-30 days after 1st application                |
| <b>Full programme</b> | 50 litres/ha in minimum of<br>200 litres water                          | Follow with 25 litres/ha in 200 litres water<br>at approximately 5-6 week intervals |
| <b>Maintenance</b>    | 25 litres in 200 litres water<br>at approximately<br>5-6 week intervals |   |

  

| RECOMMENDED USE PERIOD |     |     |     |     |     |     |     |     |     |     |     |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
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There are many products on the market that make claims to help to improve turf grass quality. Scotts have spent many years investigating and researching 'bio stimulant' products in order to find one which really does provide significant benefits to turf. We believe that there has never been a product so extensively researched and proven through research than Greenmaster Blade. The results opposite are just a small selection from the recent (2003) study carried out through Royal Holloway College as part of a PhD thesis, supervised by Dr. A. Gange, one of the countries leading micro biologists.

**Up to 50% increase in beneficial bacteria levels**  
**Up to fourfold increase in indigenous mycorrhiza levels**  
**Up to 40% increase in root mass**

