

# *Turf Solutions*

## **Golf Range News On Primo MAXX**

John Noyce of Scotts UK Ltd discusses Primo MAXX the revolutionary new plant Growth regulator a major boon in the management of Grass Driving Ranges.

Back in April 2002 I wrote an article for GRN on the use of Shortcut a plant growth regulator (PGR) on reducing the production of grass clippings and the subsequent improvement in both time and labour in grass cutting and ball collection operations.

Since 2002 further advances in the formulation have been made with the active ingredient (Trinexepac – ethyl) and now a brand new product called Primo MAXX has now been successfully launched by Scotts in partnership with Syngenta at the January BTME exhibition in Harrogate.

Before launching the product,Primo MAXX underwent an extensive and exhaustive registration period, including turf safety, efficacy, and registration procedures over a period of 5 years, since the launch of the original Shortcut product in 1999. as well as trials at the Scotts Levington research station, trials were commissioned at the STRI under the guidance of Dr Ruth Mann along with 25 end user trials sites encompassing a very wide range of sites within the UK golf course world including parkland, heathland, Links and USGA courses. Areas under trial included fairways, tees, and greens maintained at various cutting heights and maintenance regimes in very diverse soil and climatic conditions.

Following the successful conclusion to these trials,Primo MAXX has now been registered for the use and application to all turf areas from Greens, Tees fairways through to Driving ranges. Application should made to a sward actively growing from approximately mid April onwards provided the sward is neither drought stressed or still dormant after the winter period, applications should be made on a 4-6 weekly cycle at application rates of between 2.7-3.2 litres per hectare applied either alone or tank mixed with liquid fertilizer products, and soil conditioners etc application rates depend on grass species composition in a water volume of 300-600 litres of water per hectare with a spraying unit delivering a medium spray pattern.

As previously stated Primo MAXX works by inhibiting the production of the plant growth hormone gibberelic acid which reduces inter nodal leaf elongation (top growth), after application the sward develops a more compact growth habit and improved root system, water loss through evapo transpiration is also reduced through the grass plant producing more compact leaves with a smaller surface area further improving drought stress tolerance and reducing the need to irrigate treated areas by up to 20% an important point in certain areas considering that for example in the South and East of England threats of water restrictions are already being made. To achieve optimum results applications should form part of a regular programmed application approach during the growing season.

By reducing the amount of grass clippings by up to 50% driving ranges can be more comfortably maintained with reduced mowing frequency, saving time, labour and wear and tear on machinery as well as minimizing the problem of unsightly grass clippings inhibiting ball pickup and reducing mowing capabilities.



*growing success*

Primo MAXX forms micro emulsion concentrate when mixed with water the concentrate contains 13.5% Trinexepac ethyl, the product works by reducing the growth hormone Gibberellic acid at the final stages of grass plant growth cycle and subsequently re diverts the energy saved back into the grass plant root system thus reducing top growth by approximately 50 % over a period of approximately 4 weeks when applied at label rates. The redirected energy encourages the sward to develop a thicker and denser root system which improves water and nutrient uptake and encourages lateral (side growth) helping to develop a closer thicker denser turf enabling operations such as mechanical ball collection to be much quicker easier and ultimately cleaner because of the reduction in grass clipping yields which can affect ball collecting machinery performance particularly during periods of strong grass growth, typically in the spring/early summer period.

Active ingredient uptake is mainly through the crown and leaf stomata with vastly improved product uptake compared with the technically inferior Shortcut product the time span between cutting and spraying is now as short as 1 hour compared to 24 hours with shortcut this is because of the micro emulsion concentrate formed when added to water prior to spraying which is very quickly absorbed into the grass plant. As an added bonus Primo MAXX is also fully tank mix compatible with all Scotts liquid fertilizer, Seafeed and Greenmaster Blade carbohydrate products, for improved turf performance.

Selective herbicide applications can be applied 1 week before or after applications of Primo MAXX subject to soil and weather conditions. Other benefits of using Primo MAXX include the possible long term reduction of earthworm activity by reducing the amount of organic matter (clippings) being returned to the soil a very important consideration with the possible restriction of current earthworm chemical controls a real possibility in the near future.

Certain restrictions on the use of Primo MAXX are as follows:

- Do not spray in drought conditions or during periods of grass dormancy

Primo MAXX is available in 5 litre containers, boxed in outers of 4, if required. The product is odourless, amber in colour for easy identification and is very safe to use on all turf areas. Turf does not precipitate out when mixed with water and is highly stable in the spray tank and as earlier stated fully tank mix compatible with Greenmaster liquid fertilizer products and turf conditioners. No LERAP classification is needed.

There is also a free chemical container collection and disposal scheme from UK mainland run by Scotts UK.



*growing success*