

Fertilizers for golf courses

ICI DEVELOP LONGLIFE

When any company introduces a new range of fertilizers to the sports, amenity and landscape market it usually generates a level of interest, however when that company is ICI, one of the worlds largest companies, that interest must attract major attention. So it was when in 1988 ICI Professional Products acquired the marketing rights for the Longlife range of turf fertilizers. The Longlife range has changed significantly in terms of analysis since ICI took over the marketing role from their subsidiary company SAI. As the needs of the grass plant changes in light of new cultivars, management practices and increased wear and tear on the turf, fertilizer suppliers must adapt the analysis of their fertilizer to suit these changes. ICI technical staff reviewed current research and soil analysis data from a wide range of turf situations, whilst seeking the views of experienced greenkeepers and groundsmen.

The result of these investigations has enabled ICI to bring together a range of products to suit all these different needs. In particular ICI identified the need for a zero phosphate fertilizer and this is why Finegreen NK is a key part of their fine turf range.

The Longlife range now consists of four products for fine turf and four for sports fields. All the products contain in addition to the nutrients shown, a combination of trace elements derived from seaweed, which provides a range of organic nutrients.

"One of the major reasons why the Longlife range has made such an impact in the UK market is the incorporation of the unique nitrification inhibitor Didin" states Patrick Goldsworthy, ICI's Products Technical Manager. "Nitrogen in the soil is subject to a number of transformations: one of the key processes is nitrification. This involves the relatively rapid oxidation of ammonium (eg ammonium sulphate) into nitrate by soil bacteria. In the absence of a nitrification inhibitor, grass will use nitrate as its prime nitrogen source. However, the grass plant can absorb nitrogen in both the nitrate and ammonium forms; but the ammonium form, which is less prone to leaching, is used more slowly by the grass plant resulting in a reduced flush and a longer period of growth.

By including the nitrification inhibitor 'Didin' in their fertilizers ICI ensure

FERTILIZERS FOR GOLF COURSES

The sensible use of fertilizers to counter wear from an increasing number of rounds of golf throughout the winter and summer is a part of the cultural work programme for every golf course.

Scientific soil analysis, must be an essential preliminary to any fertilizer application scheme, regardless of the overall claims or recommendations of any supplier.

The established companies all offer such a service, mostly without charge and there is also an independent laboratory testing service through the STRI, also free to contributing members.

The Golf Course has invited a number of leading firms supplying fertilizers to golf courses to contribute details of the latest developments in this field.

that the majority of nitrogen present in the rooting zone is in the ammonium form. This results in a prolonged feed from one application and a more efficient use of nitrogen due to less leaching.

Both IBDU and Didin were available, but we considered that Didin offered many advantages over IBDU.

Didin activity is temperature dependant. As temperature rises and the turf grows more rapidly. Didin releases nitrogen over a period which parallels the growth patterns of the plant. Didin is economically priced, which allows Longlife to be extremely competitive not only against IBDU slow release products, but also when com-

pared with standard conventional fertilizers. It also significantly reduces nitrate leaching.

Research into the activity of Didin is continuing. Originally developed by SKW Trotsberg of West Germany, large user trials in agriculture within the UK and exhaustive laboratory tests on nitrate leaching have been undertaken. Didin is under a long term trials programme at the Sports Turf Research Institute and preliminary results have shown significant differences with comparable products, included in the trials.

The granule itself is of high quality with excellent spreadability. Both the size of the granule and its quick breakdown (due to its organic-based formulation) will ensure minimal mower pickup. An additional benefit is that the mini-granules will not blow away as can be the case with powder fertilizers. Companies like ICI are continually watching what is happening at grass root level. Quality and evenness of application is as important as the quality of the product. There is an increasing need for high quality spreaders and the greenkeeper should be prepared to pay extra for the best spreader that performs the task and lasts, rather than "buy today throw away tomorrow", current practice.

There will be a general need for more nitrogen as increased wear and tear takes its toll on turf regeneration and as sand green construction takes place. However, this nitrogen release must be controlled by inhibitors such as 'Didin'.

Nitrate leaching will also have a high profile in the turf industry following concerns expressed by the "green" movement 'Didin' reduces leaching.



FISONS PUT WIMBLEDON EXPERIENCE TO GOOD USE

This spring will be the first opportunity for greenkeepers to try the new Fisons Greenmaster Zero Phosphate fine turf fertilizer. This product was developed and first used at the most famous area of fine turf in the world. The all England Lawn Tennis and Croquet Club, Wimbledon.

Following this venture, Fisons Horticulture and Wimbledon have reached agreement to recognise the product's origins across the whole turfcare range. The need for a fertilizer of this particular formulation (14.0.7) at Wimbledon was established during discussions between Fisons Professional Horticulture turfcare adviser, Keith McKee, and the head groundsman, Jim Thorn. Between them, they developed a renovation programme to bring the courts back to their former quality after the problems of the 1988 championships.

Fisons first manufactured the 14.0.7 fertilizer as a special order for Wimbledon. Seeing its successful performance publicly confirmed by the extremely good playing quality of the courts during the 1989 championship. Now Fisons are making it available to the rest of the industry.

The introduction of Greenmaster Zero



Phosphate brings the number of formulations in the range of seven. This increases the flexibility of the Greenmaster range in use and further helps meet the needs of the professional turf manager.

Answering questions at a recent Turfcare Seminar Keith McKee returned to the thorny question of slow release fertilizers.

He said, Fisons Levington Research Station has carried out more research in connection with fine turf into the product IBDU (isobutylidene diurea) than anybody else in the country.

Work first started in 1967 and during

trials, interesting points have arisen. The size of the IBDU granule was very important. If it is too large, it gets mown off and if too small, it releases too quickly. This is why the granule size in Fisons Greenmaster Super N is 0.6-1.7 mm, not too large and not too small.

Fertilizers containing 100% IBDU has a very slow start up rate. In fact, it can appear for some weeks that no fertilizer has been applied at all.

He added that very small amounts of IBDU in a mix are really a waste of money as they serve no useful purpose. "Our trials and experience show

GREENMASTER - THE RIGHT TEAM SELECTION, WHATEVER YOUR GAME.



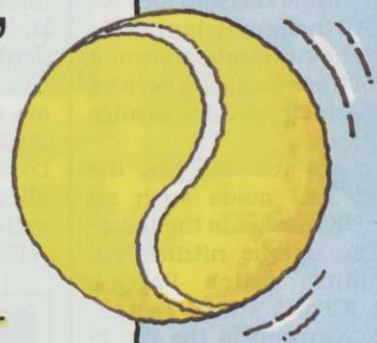
Last year the All England Lawn Tennis & Croquet Club Wimbledon chose the two newest members of the Greenmaster team for the Wimbledon championship courts. The application of Zero Phosphate for turf preparation pre-tournament and Turf Tonic as a late summer feeding afterwards has proved an ideal combination, highly commended by Jim Thorn, Head Groundsman.

Greenmaster's free flowing granules are easy to apply and ensure excellent coverage. Therefore giving a uniform turf reponse of balanced growth and good colour.

Whatever your particular turf care needs or problems, there's sure to be a winning Greenmaster formula or combination for you.

So, pick your own unbeatable team from the Greenmaster range - you'll get the right result.

GOOD SERVICE



ALL ENGLAND



THE PHOSPHATE FREE SPRING AND SUMMER FEED



THE SPRING STARTER AND SUMMER TONIC FEED



By Appointment to HM The Queen
Manufacturers of Horticultural Products
Fisons plc Ipswich

that at a standard application of 35g fertilizer per square yard, at least 10 units of IBDU are required in the product formulation to achieve truly extended turf growth and colour response. The chart Fig. 1 shows the reaction of IBDU as compared with a conventional release fertilizer.

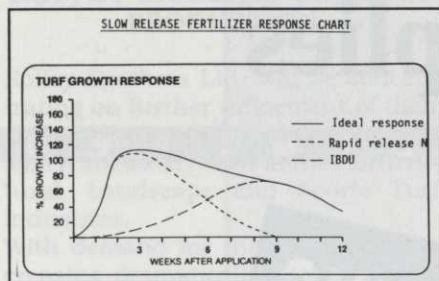


Figure 1

The dotted line shows the release pattern for conventional, rapid release fertilizer which releases to peak after about three weeks and eventually runs out after about eight weeks."

"The dashed line shows the release pattern of IBDU. This takes about three weeks to start working and then releases to give a twelve week release."

"Conventional fertilizers release quickly and have a shorter life. Pure conventional release has a longer life, but a delayed start."

"The ideal is shown by the continuous line. This is a mixture of rapid and

controlled release. Fisons Greenmaster Super N contains 50% controlled release fertilizer in the form of IBDU and 50% rapid release fertilizer so giving the ideal release pattern."

NEW DEVELOPMENT FOR STA-BRITE

Sta-Brite, who have just moved from Farnborough into a newly fitted-out freehold warehouse and office complex in Basingstoke, are sole UK distributors for Schweizer Fertilizers. This unique range of time-proven formulations is geared to specific turf problems, with golf courses very much in mind.

In all there are 10 granular fertilizers, one to suit every type of sports turf whether in good condition or poor and on every type of soil. Of these, Nitro-green-32, Certoplant Golf, Sport-Green Golf and Turfextra Golf, are micro-granulated to under 1mm and suit the finest turf on golf greens, while the others are fine-granulated to between 1 and 2.5mm for golf tees and fairways.

Schweizer Fertilizers are based on blends of top quality Nitrogen sources, including IBDU and UF for slow release and organics for faster action, plus well balanced P, K and Mg content and essential trace elements.

Certoplant is worthy of special mention as the international best seller and a totally unique product which improves the penetrability of the soil via silica and ion exchanges, thus stimulating root growth. It is recommended for combatting a variety of turf problems and is ideal both for pre-seeding and maintenance.

BASF SPECIFIED FOR SAND GREEN CONSTRUCTIONS

BASF, the German chemical giant, produce a range of slow release fertilizers in the UK under the Floranid label. The Floranid Turf, 20:5:8 with 2% magnesium is specially suitable for the pre-fertilization of sand green constructions and a number of golf course constructors are advising and specifying its use.

A 36hole complex at Calverton due to open in April has specified the product, as well as 18 holes under construction at the Marlwood Golf Centre, near Bristol and it is being used by Southern Golf with their construction at the new Denham Court golf course, to the north-west of London Airport. As well as the general purpose Floranid NPK 15.9.2, used as an economical turf fertilizer for low intensity areas, there is Floranid NK

FAST DELIVERY



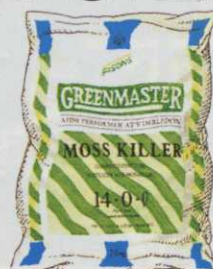
ACCURATE RELEASE



IN ONE



USES GREENMASTER FINE TURF FERTILIZERS.



FOR HEALTHY BALANCED GROWTH

THE QUALITY SLOW RELEASE TURF FERTILIZER

FOR QUICK AND EFFECTIVE MOSS CONTROL

THE ALL IN ONE FERTILIZER AND WEEDKILLER

FOR MOSS CONTROL AND A TOUGHER SWARD

FISONS

Fisons plc, Horticulture Division, Paper Mill Lane, Bramford, Ipswich, Suffolk, IP8 4BZ. Tel: (0473) 830492 Tlx: 98168 FIBRAM G Fax: (0473) 830046

READ THE LABEL BEFORE YOU BUY. USE PESTICIDES SAFELY. Greenmaster Autumn and Greenmaster Mosskiller contain ferrous sulphate. Greenmaster Extra contains MCPA and Mecoprop. Greenmaster is a Trade Mark of Fisons plc. © Fisons plc 1990.

14:0:9.3 for fine turf application, requiring potassium and nitrogen, but where there is an adequate level of soil phosphate. The usual recommended use is with Floranid N providing an ideal balance between the quick and slow acting nitrogen.

ROFFEY INCREASE COMPOST PRODUCTION

Roffey Brothers Ltd. will be concentrating on further refinement of their extensive range of quality composts which are widely used in the Horticultural, Landscape and Sports Turf industries.

With demand for their products increasing dramatically, Roffey Brothers Ltd. produced over 25,000 tonnes of sports turf dressings and golf green construction mixes last year. The company has now established an enviable reputation for consistently high quality products.

During 1990, major investment will be made in additional bulk handling and packing capacity, whilst further quality control systems will be initiated to ensure that the high standards are maintained.

The company manufactures a standard range of RBL XYLORGANIC, but specialises in producing specific formulations, based on the results of soil analysis, to suit the individual greenkeeper's requirements.

As all sports turf dressings manufactured by Roffey Brothers Ltd. are screened to 3mm this has enabled greenkeepers to make lighter, more regular applications of dressings containing major nutrients, trace elements and soil conditioners, which are readily assimilated into the turf structure giving more even growth patterns and true surfaces.

Five years ago, they introduced RBL XYLORGANIC fine turf dressing, a unique product which has become an established favourite with many

greenkeepers. The combination of three soil conditioning materials, including seaweed, a wide spectrum of trace elements and a sand which is produced to a very tight particle specification, has resulted in a dressing material which helps the greenkeeper combat the severe effects of compaction caused by the pressures of modern, all year round play and maximises the availability of nutrients from applied fertilisers.

As a result of the analyses the specification of RBL XYLORGANIC will be altered slightly to adjust the relative ratios of the trace elements to increase the proportions of Magnesium and Sulphur.

It has been found that, although many fertiliser manufacturers are including Magnesium in their products, the rates of incorporation are only sufficient to replace that normally lost during normal growth and mowing operations. If soil reserves are seriously depleted, it seems to be more effectively applied in the top dressing, particularly after tining operations.

MELCOURT'S DEDICATED TOP DRESSINGS AND SOIL CONDITIONERS

Choosing the right formula top dressing is a vital factor in grasscare generally, and the golf course is no exception. Melcourt Industries, specialist suppliers of organic landscaping products, have three ready-mixed top dressings, each dedicated to a specific application, which will enable the groundsman to maintain a firm, fertile and well conditioned surface.

HR top dressing is specifically formulated for use in higher rainfall areas, allowing free drainage while providing a good buffer of top quality loam, to encourage grass growth. On the other

hand, LR top dressing should be used where water retention is desirable, in lower rainfall areas for example and is a particularly good choice for playing fields and amenity areas.

Finally, Melcourt's HT Sports is a high quality top dressing created specifically for golf courses and bowling greens, where a free draining yet thatch resistant surface is required.

In each case, a high humate content works together with a high action exchange factor to help the long-lasting release of nutrients and encourage growth.

All three Melcourt top dressings are 100% organic and of a completely consistent formulation. This means the greenkeeping professional can rely on achieving the same firm, fertile and well conditioned surface next time round, without having to put up with unpredictable fluctuations in quality and mix. For the groundsman who wishes to mix his own, Melcourt will supply loam and other ingredients to suit individual requirements.

Melcourt also produce soil conditioners, such as Adheart, Super Humus and Composted Garden Bark. Adheart is a high humate concentrate which enhances the texture and structure of the soil by improving drainage and breaking down clays, and is ideal for golf and bowling greens. Its movement through the soil stimulates growth at all levels, particularly the root zone.

Super Humus is ideal for giving impoverished soil an instant enriching humus boost, while Composted Garden Bark, processed from conifer bark, will enhance fertility, improve drainage and stimulate healthy root growth in all types of soil.

All Melcourt's products are distributed nationally in either bagged or bulk form, with "walking floor" trailers available for uneven sites or where storage space is a problem.

IN 1989

FARMURA LAUNCHED
'ZORBIT' THE NEW
TURF WETTING AGENT
FORMULATED
SPECIFICALLY FOR USE
ON FINE TURF

RESULT: GREENKEEPERS VERY PLEASED. COMPETITORS NOT PLEASED AT ALL!

STONE HILL, EGERTON, ASHFORD, KENT, TN27 9DU. TELEPHONE (023 376) 241/581

ZORBIT
WETTING AGENT

- Promotes a healthy green turf colour
- Eliminates localised dry spots before they occur.
- Relieves soil compaction in heavy wear areas
- Encourages a more uniform movement of water through the soil profile
- Stimulates and maintains deeper rooting

6
LITRE
easy
dispenser
pack

LIQUID FERTILIZERS FROM FARMURA

The Farmura Flo-Gro range of high quality liquid fertilizers represents a completely new and revolutionary approach to turf nutrition. Specially formulated for use on turf following a successful national commercial users trial programme Flo Gro liquid fertilizers offer the professional greenkeeper, groundsman and landscaper an advanced range of exciting products providing an effective, safe and simple alternative to conventional fertilizer applications.

Flo-Gro range offers the modern turf manager liquid fertilisers in a combination of nutrients that are designed to suit a wide range of situations. Some of the Flo-Gro products contain "Didin Fluid" the slow release nitrogen inhibitor which phases the amount of nitrogen available to the plant.

These liquid fertilisers eliminate unsightly powder and granule residues and mower 'pick-up' on fine turf. Formulated as liquids Flo-Gro ensures more accurate and simple measuring and application can be combined with pesticide and other liquid turf care products.

Initially six Flo-Gro products will be available for use on turf and each is packed in 20 litre plastic containers, each product is colour coded to ensure easy recognition.

Farmura is well known for its role in pushing the introduction of environmentally safe turf management products for greenkeepers, have now taken on a new roll.

The 'Turf Iron' is a one man operated self propelled machine utilising a unique three roller system, each one being three feet wide, that gives putting greens a look that they have just been 'ironed' without, the manufacturers claim, any compaction.

Advantages gained by using the 'Turf

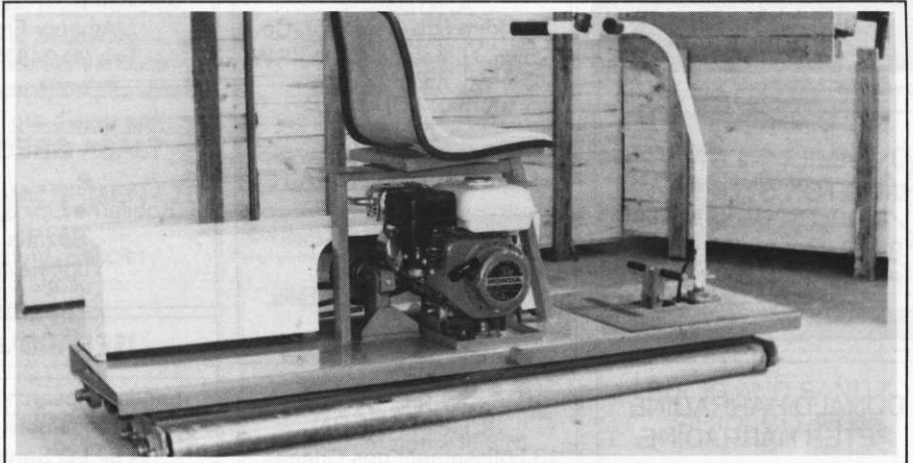


Iron' are faster, more even greens, longer life for mowing machines by not having to cut as low and better control of moisture content.

The 'Turf Iron' is powered by a Honda engine and very simple to operate using only two foot pedals and handle bars

to manoeuvre the three 36" x 41/2" rollers. The complete unit comes with its own roll-on-roll-off trailer fitted with heavy duty tyres. At the ideal operating speed the 4-5 mph an average size golf green of 600 sq. yds. will take about ten minutes.

below: 'The Turf Iron'



Farmura
Environmental

IN 1990

FARMURA WILL MAKE
THE NEW 'FLO-GRO'
LIQUID FERTILIZERS
AVAILABLE TO THE
TURF INDUSTRY

FLO GRO
LIQUID FERTILISER

● Maximises nutrient uptake at soil and foliar level — reduces soil build up of excess nutrients

● Encourages more even application through spraying, providing even grass growth response

● Stimulates a healthy green colour without undesirable flushes of growth

● Eliminates unsightly powder and granular residues and mower 'pick-up' on fine turf

20
LITRE
plastic
drum

RESULT: GREAT NEWS FOR GREENKEEPERS. BAD NEWS FOR COMPETITORS

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