

SPRING FERTILISERS

It's time for a good feed, says MICHAEL BIRD – and he doesn't mean your Christmas dinner...

A call for all fertilisers containing nitrogen to state the source of the N present in the bag, box or bottle has come from Dave Lawson, soil chemist with the STRI, Bingley. Dr Lawson comments that those manufacturers who clearly display the source of their nitrogen are providing an important service to end-users. By identifying the type of N present, turf professionals will be able to optimise nitrogen applications in line with prevailing soil conditions, grass type, pH levels and disease risk.

A typical case cited by Lawson is that of ammonium sulphate, which has been shown to be the best source of fertiliser nitrogen for turf comprising fine fescues and bents, helping produce the highest quality finish. "This is a result of the acidifying properties of ammonium sulphate, which help reduce earthworm casting and fungal disease while discouraging annual meadow grass," he explains. There is, in fact, evidence that ammonium may be toxic to annual meadow grass, says Lawson.

Over-acidification of the turf needs to be avoided and this is achieved by blending organic nitrogen sources such as dried blood and poultry manure with ammonium sulphate – a mix favoured by many of the leading fertiliser manufacturers as it also produces a longer term N release period. Dr Lawson stresses that organic N sources should not be employed as the principal source of fertiliser nitrogen as over-use can lead to severe disease problems. Another problem is acidification of the rootzone, which can occur rapidly in newer, free-draining constructions. As a result, Lawson recommends less dependence on ammonium sulphate in favour of urea or ammonium nitrate, both of which are used commonly in liquid fertilisers and have a much reduced acidifying effect. The same maxim is applied where creeping bent grasses are commonplace as these prosper in non-acidic soil conditions.

A word of caution is sounded by Lawson over the application of slow-release fertilisers containing ureaformaldehyde-N (methylene urea). Regular use of such constituents is known to encourage the establishment of annual

meadow grass in fine turf and he is concerned that other products which release nitrogen in a similar way to ureaformaldehyde may have a comparable effect.

The longer term consequences of the newer slow-release nitrogen materials have yet to be investigated.

While the scientists and researchers get to grips with new materials and new techniques, there is much to be considered on a practical basis by those looking ahead to spring fertiliser programmes. Probably the most important point to remember is that there is no standard programme which can be followed. Every course will have its own specific needs according to soil and grass type, anticipated turf wear rates and location. A fertiliser applied in March in Cornwall will respond quite differently to the same product applied on the same day on Tayside.

Advice given by manufacturers or fertiliser suppliers should always be based on a soil analysis report. ICI, for example, offers a free analysis service to customers which is used to prepare a planned fertiliser programme for the season. When the report is delivered, suggested levels of NPK are given based on background information regarding the course which has been supplied with the sample. ICI's reports and recommendations are based on soil nutrition levels advocated by the STRI. However, the company has found that many people regard these as being too high, cutting them back accordingly, with negative results in future years. As a guide, ICI says that traditional greens and tees will need 80 – 200kg N, 20kg P and 60 – 150kg K. Sand constructed greens will require 250kg N, 20kg P and 150kg K, final levels in all cases depending on a soil analysis. The company recommends that 40 to 60 per cent of N is given in the spring, similar levels in summer and 10 to 20 per cent in autumn. P and K should be applied throughout the year as required, with the main K application in the autumn to help promote root development and winter hardiness.

Slow-release nitrogen fertilisers can be applied early in the year to help maintain strong, healthy

grass growth during periods of high wear, eliminating the need to make constant applications and reducing the risk of flushes, speckling or irregular growth. Such a product is ICI's Longlife Mini-Gold, a high nitrogen (31:0:0) mini-prill fertiliser suitable for use on fine turf where phosphorus and potassium levels are satisfactory. Release of the sulphur-coated urea is controlled over a period of up to 14 weeks, eliminating scorch and reducing leaching. Application rates are from 15 to 30g/sq metre with one 25kg bag capable of treating up to 1,660 sq metres. The ICI range is very comprehensive and where a balanced NPK fertiliser is preferred as an early spring application Longlife Spring and Summer 14:3:7 is a very popular alternative. Based on sulphate of ammonia combined with the slow release element 'Didin' greenkeepers can expect up to 12 weeks nitrogen release.

A mini granule offering controlled release of nitrogen, phosphorus and potassium for fine turf throughout the season from just one application is Grace-Sierra's Sierrablen Mini. Having an analysis of 22:3:7, the product is applied in February or March and has a longevity of up to six months at 21degC average soil temperature. Resin-coated, each granule's release rate is dictated solely by soil temperature, with higher temperatures reducing longevity. Recommended application rates are 35g/sq metre on standard greens and 50g/sq metre on sand constructions, said to provide between 50 and 60 per cent of the turf's spring/summer nutrient requirements. Any shortfall can be made up with a liquid NPK fertiliser during the growing season. The company also offers other formulations giving five month, and greater, release periods from a single application.

Rigby Taylor's Mascot → 14

ALS Premier Range of Fertilisers

NEW! **ALS** **NEW!**

HORTICULTURAL, FORESTRY, SPORTSTURF,
LANDSCAPE AND AMENITY SPECIALISTS
AMENITY LAND SERVICES LIMITED

Long Lane, Wellington, Telford, Shropshire TF6 6HA
Telephone Telford (0952) 641949 (24 Hour Ansaphone Service)
Fax: (0952) 247360

Granular Shrub Fertiliser

Granular Tree & Shrub (Slow release)
4-19-10+8% mg 25kg

Premier Turf Conditioners

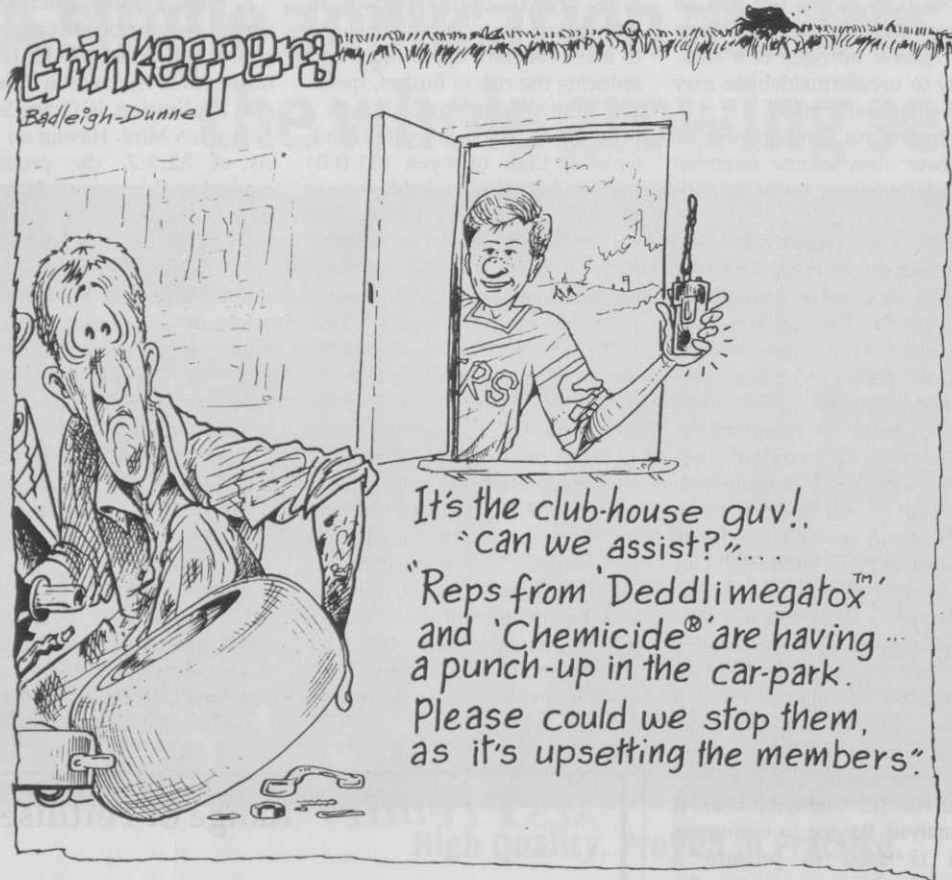
Sea King Liquid Seaweed 10L
Premier Liquid Chelated Iron 7.2% 10L
Premier Soluble Iron 20% 4kg
Seaweed Soil Conditioner 25kg

Liquid Fertilisers

Premier Liquidfeed 15.0.6 20L
Premier Green 'R' 18.0.0 20L

See us on Stand B11 at BTME

SPRING FERTILISERS



13 ➔ Microflow slow release liquid fertilisers have 'short-chained' methylene urea as their nitrogen source, giving a controlled release of nitrogen for up to 12 weeks, while promoting an early greening without growth flushes or fear of scorching, even at higher rates. Suitable for all turf areas, the product is available in three different formulations supplied as a solution which mixes instantly in water without agitation. Applied by conventional spray equipment, Mascot Microflow is available in 28:0:0, 18:3:6 and 15:0:10 formulations, the last two with added chelated micronutrients and iron respectively.

To promote rapid early season turf recovery following winter play, Gem Professional recommends the use of its Turf Tone plus Iron, a 6:0:3 formulation designed to stimulate early growth and tillering to thicken the sward. Nitrogen is supplied in readily available form within a coarse quick-acting powder which requires very little moisture to wash it down to the rootzone while remaining in place, during

grooming or verti-cutting.

Similarly designed to bring forward spring renovation programmes is Key Turf Tonic from Vitax, suitable for application in early March and at other times of the year when turf condition needs a boost. Supplied as a powder at a 2.1:0:2.5 + 3% iron formulation, the product also helps control moss and prevent fusarium patch disease.

Natural plant growth stimulants, such as seaweed extract, have been shown to improve both grass root and shoot development to provide a strong, healthy foundation for the growing season. Furthermore, trials on turf treated with Maxicrop's seaweed extract have produced increased plant chlorophyll levels, encouraging photosynthesis. Despite the proven results, Maxicrop admits that the influence of every single component contained within seaweed extract is yet unknown. Although this has produced scepticism in some quarters, one thing is certain: There is nothing harmful within the product, which is totally natural, containing growth

compounds which are already present in grass. Maxicrop offers a range of seaweed-based formulations with added nutrients, iron and trace elements suitable for use during the year as a turf conditioner, general purpose feed, green-up agent or aid to establishment. The company is delighted to discuss trial results and recommend programmes for specific turf areas and needs.

A range of seaweed-based liquid feeds as well as liquid fertilisers is offered by Agriland. The company's latest fertiliser product, Tournament, is designed as a total feed for application by sprayer up to five days ahead of competitions and where stressed or badly worn turf needs reviving.

Analysis is 15:0:3 accompanied by organics, trace elements and other ingredients which, says Agriland, nourish the turf and create a durable visual effect, bringing out colour and promoting good, even growth and vigorous rooting. Tournament is available in 20 litre containers, with six cans sufficient for treating 18 greens. It can also be tank-mixed with herbicides.

Project hunts for stories from the golf course

Does the heady coconut smell of gorse in the height of summer spark fond memories of days on the golf course? Do any trees at your club have a story to tell – the ball lodged in the fork of a branch or a particular species planted to commemorate a person or an event, a hole in one perhaps? Are there any wild plants special to your course and are they featured by the club in any way, for example in a badge or in an award for golfing achievement?

The connections between golf and the natural environment have always been strong. Flora Britannica is a project which aims to keep and record those connections. All people with an interest in golf are being invited to contribute their own stories to Flora Britannica – together they will feature in a book to be written by naturalist and broadcaster Richard Mabey.

The Flora Britannica project is keen to involve clubs in celebrating their links (sorry!) with wild plants. "English Nature's Hole by Hole Guide to the Wildlife of Royal St. George's for this year's Open proved extremely popular and could be easily repeated elsewhere", says John Newton the project's co-ordinator. "Compiling a map of a course which tells both golfing and plant stories is another initiative which we are following up. However, there are many other possibilities and we would be delighted to talk to clubs who have their own ideas."

If readers of Greenkeeper International would like to contribute a story to Flora Britannica or to explore the idea of promoting their clubs connection with wild plants, please contact John Newton at Flora Britannica, 41 Shelton Street, London WC2H 9HJ. Tel. 071 379 3109.