One of the most difficult and damaging diseases of turf is probably fusarium patch disease (Fusarium ni-vale) which attacks most varieties of grasses used on amenity and ornamental situations. However, a new systematic fungicide is now on the market which, in wide-scale trials, over the past two years, has shown a very high level of control of the disease.

The basic active ingredient is thia-bendazole – chemical name 2-(4-thiazolyl) benzimidazole. It was developed by Merck Sharpe & Dohme and has been in use as an anthelmintic for livestock since 1962. The new formulation developed by Rothwell Plant Health Ltd., is now available under the brand name of 'Tecto Systemic Turf Fungicide' and is marketed in the U.K. by Synchemicals Limited.

Attacks of fusarium patch disease can occur throughout the year but are likely to be most serious during late summer and early autumn or whenever the weather is dull and damp. Like most fungal diseases; it flourishes in conditions of low sunshine and will attack grass in the middle of winter if conditions are mild enough. This situation can be particularly bad if too much nitrogen has been applied in the autumn encouraging a late growth of lush grass.

The first signs of the disease are usually small, circular patches, about 1 to 3 in. in diameter which have a dull, slimy appearance. This can be preceded either by browning of the grass or copious growths of mycelium which begin to show up before the grass discolours. The grass then rapidly becomes limp and collapses whilst in moist conditions a faint fringe of white or pale pink mycelium appears and tends to mat the aerial parts of the plant together. The patches rapidly lose their colour and eventually the grass blades turn brown. If left unchecked the patches will gradually increase to 12 in. or more in size as the spores spread and infected areas will begin to merge into each other in large irregular areas.

The fungus may penetrate into the crown of the plant which collapses and will often die right out allowing indigenous weedy species to take over.

Attacks are usually started by renewed growth of dormant mycelium present in the sole of the turf. The disease is spread by spores being carried on machinery, feet or by infected grass cuttings being moved from one place to another. As soon as conditions are right, the disease begins its attack on new areas of turf.

Until now the most widely-used treatment for the disease has been with a mercurial dressing. However, the main disadvantages with this chemical is that it often reduces the greenness of the grass and this is particularly important as far as sports and amenity areas are concerned. In addition, there are indications that the effect on colour is a sign of reduced photosynthetic activity and this, of course, affects the entire growing process of the grass.

In trials with Tecto Systemic Turf
Just like your club, your turf needs a professional.

For expert help and advice with their game, most club members have a professional to turn to. But who can a green keeper turn to for help in keeping his turf up to par?

His own professional: SAI TURF FOOD

Courses like Carnoustie and Muirfield use SAI Turf Foods. It works wonders with grass.

It comes in the form of mini-crumb granules which makes it easy to spread. It also stays where it’s put, releasing its goodness slowly into the soil to strengthen grass growth.

For stronger, greener, cleaner, healthier turf, try SAI.

All enquiries to the manufacturers or to our accredited suppliers for England and Wales: Chipman Chemical Co. Ltd., Horsham, Sussex. Telephone 60341/5

Hortus House, 3 John’s Place, Edinburgh.
Telephone: 031-554 5451
Fungicide, particular attention has been paid to any changes in colour of the turf following treatment and comparative trials with mercury have shown a much better colour result is obtained with Tecto Systemic Turf Fungicide.

Since 1971 trials have been carried out on a range of golf greens and fairways, bowling greens, tennis courts, cricket pitches and ornamental turf areas. Best results have come from an application of 2 oz. of Tecto Systemic Turf Fungicide in 2 1/2-10 gal. of water for 1,000 sq. ft. using a conventional sprayer.

Comparative trials in 1972 using mercury salts, Tecto Systemic Turf Fungicide and untreated control plots over five different sites showed that the area treated with mercury salts reduced the infection area one week after treatment to 77 per cent compared with 100 per cent on the untreated area, while that treated with the new fungicide, showed a reduction in the infected area to 39 per cent. Six to eight weeks after the first treatment with a second application at the four week stage, the infected area in the control plot had risen to 108 per cent, the mercury treated area was down to 62 per cent while the Tecto treated area was cut to only 24 per cent (see Table I). A big advantage with Tecto's systemic activity is that it protects the whole leaf of the plant as well as killing the disease spores.

In another series of trials carried out by Rothwell Plant Health the new formulation has also been shown to have a good level of activity against Corticium disease or Red Thread (Corticium fuciforma) and Dollar Spot (Sclerotinia homoeocarpa) and it it likely that a similar method of treatment with Tecto Systemic Turf Fungicide will be recommended for these two diseases for the coming season (see Table II).

Initially Tecto Systemic Turf Fungicide is being recommended as a curative treatment for Fusarium Patch but in areas where the disease risk is high it is likely that the chemical will be most effective when used as a prophylactic dressing as part of the general system of turf maintenance in the autumn.

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<thead>
<tr>
<th>TABLE I</th>
<th>Relative Fusarium Patch Levels</th>
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<tr>
<td></td>
<td>(Mean of five sites) 1 week</td>
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<td></td>
<td>after treatment</td>
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<tr>
<td>Nil</td>
<td>100</td>
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<tr>
<td>Mercury Salts</td>
<td>77</td>
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<tr>
<td>Tecto Systemic Turf Fungicide</td>
<td>39</td>
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<tr>
<td>(Treatment was repeated after three weeks)</td>
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<tr>
<th>TABLE II</th>
<th>Effect of treatment on Dollar Spot and Red Thread</th>
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<tr>
<td>(Mean of four sites)</td>
<td>Dollar Spot</td>
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<tr>
<td>After 1 week</td>
<td>Nil</td>
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<tr>
<td>After 3-4 weeks</td>
<td>152</td>
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<tr>
<td>After 6-8 weeks</td>
<td>21</td>
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<td>(Treatment was repeated after three weeks)</td>
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Book Review

The first edition of: A new annual 'Guide to Golf Courses in the U.K. 1973' has just been published by I.P.C. Business Press Information Services. Each Club Captain and Secretary will get a free copy. The rest of us will pay £2. Quite a lot of book for the money – over 35 oz. of information, local, general and specific. Fun to roam about in – Indian restaurants, hotels, carpets, tree surgery, fashion houses – with little snippets of Tom Scott woven into these advertisements. Golf Clubs are listed under counties and they all seem to be there including several I had never heard of. For those of you no longer living in North Kent, the advertisement of funeral directors in that area appear on page 220. Older warriors will turn to page 61 for that Ferndown restaurant 'Valhalla'.

September 1973
Quick-change artist

The Ransomes-Hahn Tournament Triplex is a remarkable machine — so remarkable that we call it the world's first Greens Management System. The Tournament Triplex is a 12hp vehicle with hydrostatic drive, which powers four separate turf maintaining operations. Each conversion, from superb greensmowing to utility mowing, to Verti-Cutting, to spiking takes less than a minute — and no spanner!

**Greens Units** A full 67” cut. Each 23”, nine-bladed cylinder can be lifted individually.

**Utility Units** Heavy-duty cutting cylinders and bottom blades for approach and tee mowing. Grass catchers provided with all units.

**Verti-cut Units** Patented twin offset blades remove ‘thatch’, keep greens in play even in difficult conditions.

**Vibra-Spiker** Now spiking takes even less time than greensmowing. High-frequency vibration penetrates to a depth of 1 3/4” with a minimum of compaction. The combination of this unique quick-change unit feature, full 67” swath for every operation, variable-speed units and individual unit lifts make the Tournament Triplex an investment which no club can ignore.

Your local Distributor is keen to impress you with a demonstration. Give him a call.

Ransomes Sims & Jefferies Ltd., Ipswich.

**RANSOMES**

Ransomes-Hahn Tournament Triplex
First British Turfgrass Symposium

Nacton IPSWICH Suffolk

Thursday 4th October 1973
**First British Turfgrass Symposium, Ipswich**
**Thursday 4th October 1973**

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Please tick

- Travelling by car
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- Arriving 3rd Oct.
- Arriving 4th Oct.
- Earlier

Cheque £3.00 enclosed
(payable to B.G.G.A. Conference)

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Featherbed Lane, Croydon CRO 9AA

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First British Turfgrass Symposium, Ipswich
Thursday 4th October 1973

Arranged by The British Golf Greenkeepers' Association in the interests of greenkeeping and golf at large.

This conference will interest all concerned with providing and maintaining fine turf surfaces, especially for golf. Future conferences will be held at other centres in the British Isles.

Theme

The 1973 theme will be Irrigation and Drainage. The symposium will include papers by leading specialists on automatic water systems; new drainage techniques; constructing artificial water hazards; use of new machinery; research – its progress and limitations. A general forum with questions and answers will follow each paper.

Registration

Early application for registration is advisable. Attendance is limited to 250. Apply on the enrolment form and send it with cheque for £3.00 to:

B.G.G.A. Conference,
Addington Court Golf Club,
Featherbed Lane,
Croydon CRO 9AA.

The registration fee covers morning coffee, buffet lunch, and a bound copy of all papers delivered at the symposium. Transcripts of discussions will be published subsequently. Train times, hotel list, map of conference location and detailed programme will be sent with confirmation of your registration. You will receive name tag and conference proceedings on arrival at the Conference.

Please apply early.

Travel

Ipswich is 74 miles from London by road (mostly dual carriageway). There is ample car parking at the Conference site. Trains run at hourly intervals from Liverpool Street Station and take about 80 minutes.
The 8.30 arrives Ipswich, 9.51
The 17.30 from Ipswich arrives London, 18.55

(The B.G.G.A. acknowledges gratefully the assistance of Messrs. Ransomes, Sims, Jefferies Ltd. in the organisation of this first symposium.)
Speakers

Chairman
Geo. McPartlin, O.B.E.

Speakers
Dr. A. N. Ede
Land & Water Management

J. R. Escritt, M.Sc.
Director, The Sports Turf Research Institute

G. G. Fisher, B.Sc.
Cambridge Soil Services

R. W. Sitwell
Watermation Limited

T. Mascaro
The Hahn Company, U.S.A.

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Robert Mitchell
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D. Gourlay
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Superintendents
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Andrews

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Thorpe Hall Golf Club

L. Millar
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Geo. Wilson
Le Prieuré, Paris

F. W. Hawtree
Vice President, B.G.G.A.
When an advertiser tells you that a conversion is quick it's customary to take it with a pinch of salt. But this time take it as fact. Trying is believing, and you can try it for yourself at your local Ransomes dealer! You simply pull the connecting pin and quick-couple cable, remove the existing unit, and slip the selected unit into place. It takes less than a minute! Honest!

**Ransomes-Hahn Tournament Triplex**

**Tournament Triplex Greens Unit**
A full 67" of cutting width with the exclusive features of variable speed cylinder drive, giving you a cylinder speed completely independent of ground speed. Units may be operated one-down, two-down or all-down.

**Tournament Triplex Utility/Tee Units**
Triplex utility units use same seven-blade design as greens reels, but have heavier fairway blades to withstand approach and tee mowing. These units are ideal for approach maintenance and the precision cutting of tailored tees, and can be adjusted down to 3/4" for greens-mowing after top-dressing.

**Tournament Triplex Verti-Cut Units**
Verti-Cut units use durable, yet thin offset blades to remove thatch and grain as they begin to form. With 67" of cut (the Verti-Cut units are the same width, work at the same speed, and use the same grass catchers as the greens and utility units) and a riding vehicle, these attachments are ideal for preventing the development of thatch etc., lessening the need to take greens out of play for renovation. Variable-speed cylinder drives provide high tip-velocity even at low forward speeds.

**Tournament Triplex Vibra-Spiker**
Vibra-Spiker reels use gentle high-frequency vibration to achieve deep penetration, without excessive weight, even when ground is hard and dry. Spiking (summer aerification) provides root pruning and moisture absorption, relieves surface compaction, and conserves fertilizers and fungicides by getting them immediately to the root zone. Full 67" swathe and Triplex speed make spiking a task that now takes even less time than greensmowing. Spiker penetrates to depth of 1/2".

**Ransomes-Hahn Tournament Triplex**
- the world's first Greens Management System.
THE INSTITUTE OF GROUNDSMANSHIP INTERNATIONAL EXHIBITION 1973 to be held at the University of London Athletic Ground MOTSPUR PARK, NEW MALDEN, SURREY on the 18th, 19th, & 20th of September

Everything that is needed for the Lawn, Sports Ground, Playing Field, Leisure Area and Golf Course, will be on show at this important Exhibition.

If your interest is in these areas, then Motspur Park is the place to see and discuss the latest in Mowing Equipment, Aerating Machines, Rollers, Distributors, Tractors, Power Units, Power Saws, Watering Equipment, Spraying Machines, Markers, Nets, Seeds, Fertilisers, Chemicals. In fact, all you need to maintain your professional standards, in one place at one time.

Write the dates in your diary now - times between 10 a.m. and 6 p.m. It's easy to find, close to the New Malden Roundabout on the A3 Portsmouth Road, or direct by train from Waterloo.

Further details from
The Institute of Groundsmanship, 108a Chessington Road, West Ewell, Surrey. 01-393 8027

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When you have tried all the other "Specialists" and failed to find the right gear at the right price — get on to us!

For over 40 years, we have wheeled and dealt in Surrey, Berks and Bucks. Nowadays, we cover most of Middlesex, Hants and Oxon, too. We handle all the better Manufacturers' equipment, mostly on a "Main Distributor" basis. Our inventory of Professional equipment is vast and so is the supporting stock of spares.

Greenkeepers, Groundsmen and Club Secretaries are always welcome at Sunningdale to inspect our set-up, to obtain information and leaflets, or just to pass the time of day! Alternatively, if you care to write or telephone, we will deal with your inquiry, honestly and fully.

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The British Golf Greenkeeper
New Products

New Machine For Turf Management
For the first time in the United Kingdom, Howard Rotavator Co. Ltd. will be displaying their tractor powered ‘Turf-Quaker’ machines, the latest equipment in the field of turf management. Special blades operate in such a way that the turf in addition to being slit is also shaken so that compacted roots are freed, whilst the surface is hardly affected. These machines, which are proving most effective in the U.S.A. and Australia, should be of great interest to grounds-men responsible for playing fields, sports grounds, etc., whilst a hand-controlled model is available for lawns.

Hand-controlled Rotavators and the full range of Howard Bolens riding mowers and garden tractors will be on display together with some of the many attachments available for those machines.

New Sprayer From Allmans
A new model of the Polypak shoulder mounted sprayer will be introduced at Motspur Park by E. Allman & Co. Ltd. of Birdham Road, Chichester, Sussex. Stand No. H26.

It is an 18 litre (4 gal.) version, which replaces the 13.5 litre (3 gal.) model.

A translucent polythene container is mounted on a lightweight steel frame which has an adjustable shoulder harness.

A lever operated pump provides a working pressure of 65 p.s.i. and a full range of booms and attachments is available.

Containers are interchangeable so that most types of chemical can be applied without fear of contamination.

Price of the new 18 litre model is £22.50 plus V.A.T.

S. H. GOSS & CO.

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SPECIALISTS

Selective or Total Weed Control
Grass Growth Retarding
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Telephone: Brentwood 216107

Motspur Debut For Ride-on Mower From Flymo Ltd.
A 25 in. ride-on rotary mower new to the United Kingdom will make its Motspur Park debut on the stand of the Consumer Division of Flymo Ltd. of Watford.

The new, compact Toro 25 ride-on mower is designed to speed mowing time on semi-formal grass areas of around one to two acres.

All-up weight of the new machine is 210 lb. Length is 48 in., width 31 in. including the cutter unit, and height is 34 in. The turning circle is only 62 in. to the inside rear wheel.

Also seen at Motspur Park for the first time will be the Toro Trojan 3 with three 21 in. heat-treated rotary blades providing a 60 in. cut under a heavy-duty 10 gauge steel cutter housing. With a more powerful 14 h.p. Kohler engine than the earlier 50 in. version, the Trojan 3 has a daily capacity for 15 acres of rugged grass-cutting at 3.5 m.p.h.
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BY OUR SPECIALISED MACHINES

CAN TRANSFORM

**WET GREENS AND FAIRWAYS**

DEEP AERATION OF GREENS
BY SUB-AIR MACHINE
AT ANY TIME OF YEAR
NO SURFACE DAMAGE

We are unaware of any other machine which penetrates to seven inches yet keeps the greens undamaged and in play

Very moderate charges include all transport and an experienced operator

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Northern
The President’s prize was played for at the Pike Hills Golf Club, York, on Wednesday, June 27th 1973; many thanks to our President W. (Bill) Mountain for entertaining us and providing us with a plentiful supply of foodstuff and not forgetting the many prizes, on behalf of all who took part, many thanks to you Bill.

Winners were:

**1st Division**
1st E. Paley Nett 70 winner on last 9
2nd D. Spurden Nett 70
3rd D. Roberts Nett 71

**2nd Division**
1st G. Brayshaw Nett 66
2nd H. Marshall Nett 70
3rd A. Burge Nett 74

**Visitors and V.P.**
F. W. Readman Nett 68
P. Tait Nett 70

**Forthcoming Events**
Invitation Tournament, September 19th at Wakefield Golf Club, Woodthorpe Lane, Sandal Wakefield.
Annual Match v Sheffield, at the Headingley Golf Club, Adel, Leeds, on Thursday, October 11th.
Autumn Tournament will be held at the North Cliff Golf Club, Scarborough on October 25th 1973.
No. 1 of an Annual Conference to be held all over Britain.

**Ipswich**
**Thursday**
**4th October, 1973**

All concerned in providing and maintaining fine turf will want to attend.

Conference Theme: **Irrigation and Drainage**

Leading specialists will describe new techniques, machines and materials covering all aspects vital to successful greenkeeping. Plus an open forum discussion.

**Early application is essential**

Attendance is limited to 250. Send a cheque for £3.00 to-day, with your address, club and position to:
C. H. Dix, Esq., Hon. Secretary & Treasurer, British Golf Greenkeepers' Association, Addington Court Golf Club, Addington, Croydon, CRO 9AA.