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NOTEBOOK...

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NEW from Pro-Line Sports (UK) Ltd is the innovative golf board game, Par Excellence. Beautifully produced and packaged, this game is the ultimate indoor entertainment for golfers who for any reason are prevented from getting out on the course to play a round of the real thing.

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Par Excellence allows up to four golfers to play 18 of the greatest holes in the world without leaving their armchairs. The game consists of nine laminated sheets, printed on both sides in full colour. Each side features an aerial view of an internationally famous golf hole. With the aid of fourteen dice,

each one representing a club, a directional dice, a hazard dice to add a little excitement, and a transparent overlay to meter the 'shots', players use their skill and golfing judgement to attempt to beat the par at each hole.

For further information please contact Norman Walters, Pro-Line Sports (UK) Ltd on 0342-25851.



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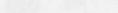
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NOTEBOOK ...

MAY & BAKER, one of Britain's foremost chemical companies is changing its identity to that of its parent, the chemical multinational Rhone-Poulenc.

May & Baker has been part of Rhone-Poulenc since 1927. The move is designed to enable the company to take full advantage of being a visible part of one of the world's premier chemical groups. However, the May & Baker name will continue to be used where its particular strengths and associations have a distinctive marketing role to play, most notably in the company's health care activities.

Dr. Keith Humphreys, chairman and managing director of May & Baker, emphasises the international dimension of the move. "In the increasingly competitive world in which we operate, it is vital for us to be seen as part of a fully integrated international group in which we can make our size and strengths pay", he said. "The group is investing in the creation of a strong international identity and our own move enables us to capitalise fully on that investment"

During its 60-year association with Rhone-Poulenc, May & Baker has already become a significant force within the group. It is a major research and production entity and

New identity for chemicals company May & Baker

makes a substantial contribution to group activities world-wide, particularly in the health care and agrochemicals areas.

Rhone-Poulenc itself is the world's ninth largest chemical group. It has a turnover of almost six billion pounds per annum. The group spends £340 million each year on research and development - a greater percentage of its turnover than some of its larger rivals - and spends a further £150 million on environmental protection.

"At present, Rhone-Poulenc trades under at least 40 different names in 140 countries worldwide, which puts the group at a disadvantage as far as other multinationals go," says Keith Humphreys. 'Rhone-Poulenc is looking to move from being perceived as a French company to one with a. true international dimension. Already more than 70 per cent of its sales turnover is outside France. Likewise, May & Baker has been seen in its turn as a UK company with overseas affiliates. This new move enables us to be seen for what we in effect already are - part of

a truly international operation".

From May 31, May & Baker Limited will trade as Rhone-Poulenc Limited, with three divisions: Agriculture, Health Care and Chemicals. Within the divisions, those operations where the name May & Baker is currently significant to their performance and market reputation, will retain this name as part of their trading identity - eg, May & Baker Pharmaceuticals, May & Baker Garden Care and May & Baker Laboratory Products.

Overseas, the May & Baker subsidiary companies operating in the Commonwealth will change their name to Rhone-Poulenc. The agrochemical interests of Rhone-Poulenc in the UK have been re-structured to enable the business to provide products and services that are linked

more closely to the needs of its

customers.
Previously known as May & Baker agrochemicals, the division has been re-named Rhone-Poulenc Agriculture: this reflects the growing involvement of Rhone-Poulenc in plant breeding, seed treatments and application machinery, as well as traditional agrochemicals.

For further information contact Keith Beeson on 0277 362127

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Dear Sir,

I see in the greenkeeping press that the R & A has pledged £250,000 support to the STRI at Bingley to investigate the fertilizer and irrigation needs

of British golf greens.

Does this mean that the R & A have decided that this is the problem? Does this mean that the advice to date from the STRI on these matters has been wrong or/and unfounded, or not even researched? Who advises the R & A on these matters?

Will this news make golf clubs paying for this advice, in good faith and coin, reconsider their position? How many greenkeepers have lost their jobs, and in some cases their health, on the 'say so' of these so called advisers? Who is going to take the final responsibility for the condition of the British golf green? SLFarrington, Course Manager, Frilford Heath G.C.

Reply from Peter Hayes Director of the STRI

"Mr Sam Farrington raises a number of points in his recent letter to the **Golf Course** concerning the R & A's research grant of £250,000, over five

years, to the STRI at Bingley.

"The two projects financed by the R & A will consist of a major project looking at the effects of irrigation, construction and fertilizer nutrition of golf green turf and a second looking at the nutrient requirements of fine-leaved fescues and bentgrass for golf greens. This research programme should be of great benefit to all European golf courses and will, hopefully, result in a return to faster, firmer and truer putting surfaces. The R & A have decided that these are the major problems worthy of a research contract at the present time. However if head greenkeeper wish to submit research proposals to the Institute, we will consider them for a future research programme. That the Institute is carrying out research into these matters does not necessarily mean that the advice given now is wrong, but every industry has to look forward and no industry can survive without a research base. For example, the advice given to people 10-20 years ago concerning the treatment of cancer or heart conditions is completely different today due to research which has been carried out over the years, but that does not mean previous medical advice was wrong. For the future demands on golf courses we need to know more bout the growth of grasses and how they can stand up to excessive wear under

different fertilizer and irrigation regimes. "To answer Mr Farrington's other points, I do not

know the number (if any) of greenkeepers who have lost their jobs on the 'say so' of advisers, and the answer to this question is not easy as many

other factors would be considered.

The final responsibility for the condition of British golf greens rests jointly between golf clubs in providing enough finance to undertake the necessary maintenance and greenkeepers with their skill to carry out such maintenance, in conjunction with the advice from agronomists from the Sports Turf Research Institute, backed by a sound research programme."

In England & Wales the average rainfall in the course of a year is between 22.5 inches and 68 inches depending on where you live. If you take the bottom figure and multiply this for the average area of a golf course (say 150 acres) you can see that in the year 76,308,750 gallons of water will have to be dealt with by surface run-off, drainage systems and general porosity of the soil. This figure also increases if we have a year like the last. Also bearing in mind that two thirds of the rain falls between September and May, the winter months in golf can be very hazardous. Controlling the greenkeeping aspects of a particularly wet course in the winter, where the greens have a high sod content, the problem of closing the course is dependent on the condition of the fairways, and not the fact that the greens are well under water.

Whilst all clubs around are closed (and we should be really) it really amazes me at the amount of golfers who turn up to play golf. After a week's deluge, they come into the clubhouse or ring up and say, "has it been raining there then" as if we were an island that the rain had missed. Most golfers will tend to stay away if it is wet, but some I am positive will play even, as I have seen, wearing their black or green wellingtons. What possible pleasure can they get from paddling around a wet, waterlogged golf course? As it is usually only a few people who play when the conditions are atrocious, the actual damage caused by walking through sodden areas is minimal, the only problem that arises is where, wear or mud occurs on well used areas. These areas make the whole of the golf course look untidy for quite a few weeks.

So if we have the wettest winter on record, first look forward to the spring, when all your water problems are over... or just beginning!

R. R. Kates

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APPOINTIMENTS

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Secretary/Manager, Farnham Golf Club, The Sands, Farnham, Surrey. GU10 1PX Tel: 02518 2109

RIDSBARCH UPDATE

by Neil Baldwin, plant pathologist at the Sports Turf Research Institute

> BROWN PATCH Rhizoctonia Solani

BROWN patch is widespread in the USA but, until recently, it has caused relatively few problems on British golf courses. However, the disease has been seen more frequently over the last two or three years and during the summer of 1987 several severe outbreaks were seen by STRI advisory agronomists.

Brown patch, regarded previously as causing few problems, is now recognised as a serious disease of turf during the summer months.

The symptoms of brown patch are largely dependent on the weather and consequently vary greatly.

Watch out for light brown, circular or irregularly shaped

patches of blighted grass, up to 15 cm in diameter which may develop quite rapidly (Figure 1). At first sight brown patch may be confused with fusarium patch disease. The diseases can be distinguished as, in the case of fusarium patch, an orangebrown colouration to the patches may be seen together with white or pink mycelium around the patch periphery.

In general brown patch seems to affect all species of turfgrass equally, although sometimes the bentgrasses (Agrosts spp) can appear more susceptible.

Following a change in the weather, or after fungicide application, surviving plant crowns, stolons and rhizomes in affected areas produce new leaves and the bare patches gradually fill in.

Extensive observations of brown patch in the USA have

REGULAR readers will have seen, in previous issues of the Golf Course. articles describing the major turf diseases - fusarium patch, fairy rings, take-all and dry patch. Toconclude this series, attention is focused on some of the less common disease problems of golf courses. Although these diseases at present rarely significant damage, they are recognised in other parts of the world as major problems and may, in time, become serious here. Consequently, the potential threat posed by these diseases must be recognised so that control measures can be speedily implemented.

indicated that the disease most often occurs during warm (above 22 degrees), humid weather. Also, it is known that extensive damage can only occur during prolonged periods of leaf wetness caused by poor drainage, cloudy weather and a heavy dew. Furthermore, dense lightly fertilized turf is most susceptible to infection.

The persistent showery but warm weather during the summer of 1987 (in which the disease was seen extensively) would have provided ideal



Figure 1: Brown Patch disease (courtesy of May & Baker Environmental Products)

Figure 2: Antharacnose Note the black rotted base.



conditions for brown patch development.

Any management practice that promotes a dry turf surface, e.g. a good drainage system and regular scarification to remove water holding thatch, discourage brown patch. It is important to particularly switch greens every morning to remove dew as prolonged leaf wetness favours the disease. applications Summer nitrogenous fertilizers should be light and frequent rather than single heavy applications being made, particularly when weather conditions favour the

Fortunately, brown patch can be easily controlled with fungicides. Both iprodione (Rovral Green) and chlorothalonil (Daconil Turf) have a manufacturer's recommendation for control of brown patch. These fungicides will give best disease control when applied at the first signs of the disease.

ANTHRACNOSE Colletotrichum gramillicola

BACK in 1953, diseased annual meadow-grass plants from a cricket square in Birmingham were examined at the STRI and the first case of anthracnose was recorded in the UK.

At the time it was described as a rare and unimportant disease. Now, it may be found in many golf greens and, in swards consisting largely of annual meadow-grass, may cause significant damage.

The first symptoms of attack by anthracnose to watch out for are leaves of infected plants turning yellow or even red. Similar symptoms can also be seen in annual meadow-grass when it is under stress. However, diseased plants, which can occur individually or in patches, are blackened and matted at the base and are consequently easily removed from the turf surface (Figure 2).



Figure 3: Globules of 'squidge' on fine turf

If the outer leaf sheaths of infected plants are peeled back then the black reproductive structures (acervuli) of C. graminicola can be seen - a diagnostic character used to positively identify the disease.

Anthracnose is considered to be a 'biological indicator', i.e. its presence actually indicates that turf conditions, in certain respects, are poor. The disease usually only appears where turf fertility is inadequate and where compaction restricts the supply of air to the grass roots.

lasting control Long anthracnose can be achieved rectifying these by predisposing conditions. If the disease is present, the turf fertility, particularly in regard to nitrogen, should be increased during the summer months. Compaction, a problem at many golf clubs due to the ever increasing rounds of golf being played, can be alleviated by Verti-draining and slitting If these control operations. measures are deployed, the anthracnose will be contained.

In situations where anthracis causing serious nose problems, fungicides may be considered if and, used give correctly, will some control. However, the disease if soon return predisposing conditions are not rectified.

SLIME MOULDS AND SQUIDGE

ALTHOUGH not strictly speaking diseases, as they do not harm plant tissues directly, the activities of certain fungi and algae (tiny one-celled plants with no true stems or leaves in turf may cause problems by rendering the surface very slippery which, especially on sloping ground, can present a dangerous hazard to golfers.

Despite slime moulds and squidge having a very similar end result, they differ in the way they actually cause the problem.

Slime mould fungi, e.g. Mucilago spongiosa, colonise grass leaves and produce masses of spore capsules surrounded by slime.

In contrast, algae, e.g. Nostoc spp prefer to colonise bare areas in the turf that may have been originally caused by disease or excessive wear, such as on approaches to greens. These algae can multiply rapidly, resulting in a dense algal slime within the turf (Figure 3). If these areas are walked on then the algae rise to the surface, stick to one's shoes and are exceedingly 'squelchy' - hence the common name for this problem - squidge.

Both slime moulds and squidge shaded. damp, develop in poorly drained turf. Where infection is heavy the slime produced can be brushed into heaps and taken away. Areas can then be treated with calcined sulphate of iron. dichlorophen (Super Mosstox) cresylic acid Emulsion) which will suppress the slime moulds or algae for a time. The problem can only be prevented in the long term by attention to drainage and sand top dressings to keep the turf

>>

RESEARCH UPDATE

APPOINTMENTS



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