

SOME AUTUMN TURF DISEASES

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The weather conditions which prevail during the autumn period are often highly favourable for the development of a number of damaging turf diseases and precautions should, therefore, be taken to guard against disease attack. Turf disease attacks can be greatly reduced by management practice. As with human disorders, prevention is undoubtedly better than cure.

Fusarium Patch Disease

Probably the commonest disease of sports turf, *Fusarium*, is encouraged by mild damp weather which frequently prevails during the September-October period. If such weather conditions seem imminent it is wise to apply a preventive fungicidal dressing whether disease symptoms are apparent or not. This practice is particularly desirable on areas which have been prone to the disease in previous years—golf greens on damp, low-lying or sheltered situations, for example, often require precautionary treatment of this kind. Bearing in mind that moisture is essential for the development of *Fusarium*, it will be obvious that the turf can be protected by keeping its surface as dry as possible. Regular morning switching or brushing is, therefore, useful in the autumn to remove dew and to assist the speedy drying of the playing surface.

Apart from the measures mentioned above, *Fusarium* damage can be prevented, or at least minimised, by ensuring that the grass has as much natural resistance to fungal attack as possible. A generally strong and hardy sward is less prone to disease infestation than one which has been weakened by mismanagement during the course of the growing season. The disease-resisting properties of a turf can also be seriously reduced by excessive fertilizer treatment at this time of the year—encouraging a lush sward by applications of nitrogen during the autumn lays the area wide open to

Fusarium attack. Fertilizer dressings containing appreciable amounts of nitrogen should, therefore, not be applied later than the end of August as a general rule. Autumn top dressings (compost/sand dressings, soil/sand/peat dressings etc.) if applied in damp, smeary condition, or in too great amounts, or if not thoroughly worked in after application, will smother the sward and produce a surface microclimate ideal for disease development.

If, in spite of all precautions, the turf is hit by *Fusarium*, apply a suitable fungicide without delay. Mercury dressings (both organic and inorganic) and Quintozene (PCNB) give effective control.

Ophiobolus Patch Disease

This affliction is also frequently encountered during the autumn and is often confused with *Fusarium*, though its characteristic ring-shaped symptoms should make it easily identifiable. *Ophiobolus* is encouraged by much the same management and weather factors as *Fusarium*, but is particularly likely to appear on recently limed areas during a warm wet summer or autumn. Fairways are particularly prone to the condition after liming the previous winter, although if the winter liming is followed up by a good balanced fertilizer dressing the following spring the fertilizer can reduce the chances of attack.

Because *Ophiobolus* is encouraged by damp conditions, spiking and possibly drainage work can go a long way in reducing incidence of the disease.

The disease can be controlled by repeat applications of organo-mercurial fungicides at suitable rates, and if the disease appears on a golf green then treatment of this type should undoubtedly be given. On fairways the cost of such treatment over a wide area is usually prohibitive.

Red Thread Disease

Red Thread or *Corticium* is also

prevalent in autumn and is most frequent in fine turf where fescue is an important constituent of the sward (although it will attack other grasses too). Not the most serious of the turf diseases, Corticium can cause a general loss of colour and ruin the appearance of a golf green during the latter part of the season. Corticium appears particularly on swards of low fertility where nitrogen is lacking, and the importance of carefully balanced fertilizer treatment is well illustrated by considering the relative incidence of Corticium and Fusarium. Too much nitrogen encourages Fusarium, too little favours Corticium and a balance must be struck between the two.

Various fungicides will give a degree of control, inorganic mercury fungicides in many instances proving the most effective of all.

Other Fungal Diseases

A less well known disease is Helminthosporium leaf spot which also frequently appears during the summer and autumn. It is most often encountered on golf tees where smooth-stalked meadow-grass is the most important constituent of the sward. Adequate fertilizer treatment during spring and summer is helpful, and the turf should not be too closely mown. The use of more disease resistant smooth-stalked meadow-grass varieties such as Prato or Merion is also advisable.

Fairy rings of various types are common during the autumn months, most of them fairly harmless, although there are exceptions—the rings caused by *Marasmius oreades* for instance which actually destroy the turf. If you are unlucky enough to get these *Marasmius* rings on or near your greens you will just have to cut them out entirely, removing the infected soil and turf, and replace them with fresh material.

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