SUMMER FERTILISER

by R. D. C. EVANS, B.Sc.,
Advisory Officer S.T.R.I.

For ornamental lawns and most coarse turf sports areas, one fertilizer dressing in the Spring is usually enough to ensure adequate growth and a pleasing appearance through the course of the year, provided that all other factors affecting grass growth are favourable. However, this is certainly not true of the average golf green where increasingly intensive play makes a high growth rate necessary to counteract wear. Here regular summer fertilization is essential.

Composition of Dressings

Of the three major plant nutrients, two of them — phosphate and potash — should have been supplied during the Spring in sufficient quantity to ensure adequate supplies throughout the growing season. The main constituent of summer fertilizer should, therefore, be nitrogen, aimed primarily at promoting evenly sustained growth throughout the busier playing period. The material most widely used for this purpose is sulphate of ammonia which under average conditions will produce the desired growth level, if applied at intervals of five to six weeks at rates of 3 lb. per 100 sq. yd. suitably bulked with carrier. Sulphate of ammonia, of course, supplies nitrogen in an inorganic quick-acting form and it, therefore, results in a quick flush of growth which may subsequently tail off fairly rapidly, necessitating a repeat application after the interval mentioned above. To give more even and sustained growth, dried blood and/or fine hoof and horn meal can be incorporated, e.g.

2 lb. sulphate of ammonia, 1 lb. dried blood, 1 lb. fine hoof and horn meal mixed with 28 lb. screened compost (as carrier)—per 100 sq. yds. In the average season a suitable fertilizer programme might involve the application of three summer dressings. The first would be six weeks after the main spring dressing, i.e. about the end of May, the second in mid July and the third and final one at the end of August. Treatment later than August is considered undesirable, as it may lead to trouble with Fusarium patch disease. Encouraging soft lush growth during the early autumn when there is a danger of colder weather particularly, lays the sward open to fungal attack.

In order to reduce the risk of Fusarium it is sometimes wise to reduce the organics and include calcined sulphate of iron in the final summer dressing as the fungicidal properties of this material give some measure of protection, besides encouraging a pleasing dark green sward colour. The iron should be used at 1 lb. per 100 sq. yd., this being perhaps increased to 1 ½ lb. where the area is particularly prone to invasion by Fusarium.

On the majority of courses a mixture of sulphate of ammonia and sulphate of iron as described above is sufficient during the late summer period. In some cases, however, particularly on nutrient deficient soils or on seaside courses where sandy soil allows the rapid leaching of plant foods, the inclusion of phosphate and potash as a supplement to the spring application may be advisable to ensure supplies of these materials during the autumn, winter and early spring.

Difficulties

The major problem encountered in applying summer fertilizer occurs during drought on courses where water supplies are inadequate. The risk of sulphate of ammonia scorching is severe in these circumstances — relying on rain to wash
in recently applied fertilizer is always a gamble, particularly at this time of year. In these circumstances summer fertilizer may be omitted altogether and playing conditions often suffer as a result. Alternatively some greenkeepers favour materials which do not scorch, e.g. organics or possibly urea-formaldehyde preparations. Such fertilizers are, however, expensive and, if the sward is suffering severely from lack of moisture they will not encourage growth to any marked extent until rain arrives. Efficient water supplies are, therefore, really a necessity for effective and regular summer fertilizer treatment.

Some clubs also experience difficulty in timing fertilizer treatment so as to minimise interference with play. Competition dates must be avoided and dressings perhaps timed so as to provide sufficient growth and a good colour for more important championships. When weather conditions also have to be taken into account the timing of dressings can be extremely difficult, especially on busy courses. The inconvenience caused to golfers by fertilizer on the putting surface should always be reduced to a minimum. Slit tine spiking prior to dressing aids speedy absorption as does thorough watering after application. Fertilizers should also be finely ground and applied evenly with closely screened carrier if rapid disappearance into the surface is to be obtained.

The timing of applications can also be complicated by interaction with other operations. For example, weed control measures can be rendered more effective if fertilizer is applied a few days before the herbicide. The fertilizer will then assist the recovery of the grass and encourage the sward to grow into the bare areas left by dying weeds.

Conclusion

Finally it should be realised that correct summer fertilizer treatment not only ensures growth during the summer but also has a longer term effect in helping the maintenance of reasonable conditions during the winter period. Swards which are starved during the main growing season cannot be expected to produce any useful growth or provide satisfactory playing conditions for the winter or early spring. Summer fertilizer treatment is, therefore, a vital operation which no one can afford to neglect.

From the book "The Story of the R. and A." by J. B. Salmont.

While the great Bobby Jones was holing out on the eighteenth green, a club member, who had been ball-marking during the match, found himself next to two smartly dressed American ladies not particularly interested in golf.

He heard one say to the other, "A remarkably fine course for such a small town!"