Andy Sadler describes the stringent procedures that should be implemented to ensure greenkeepers receive the best quality seed mixtures possible

This article is based on a paper presented by the author, Andy Sadler, Production Manager & Crop Inspector with Barenbrug UK, at the Turf Management Conference, organised by Barenbrug UK in Portadown, Northern Ireland, in February, to update turf professionals on the company's ongoing research programme.

A turf manager might have all the skilled labour, specialist equipment and modern turf chemicals imaginable, but if the sward he starts off with is not of high enough quality he could well be fighting a losing battle. The grass seed used is the component, and the importance of choosing a product with the highest quality cannot be underestimated.

The grass seed used is the component, and the importance of choosing a product with the highest quality cannot be underestimated. A dedicated seed house will recognise this, and will have introduced stringent quality controls to ensure that the seed the turf manager sows is trustworthy and reliable.

But first, let's look at the rules and regulations governing this vital area. The production, certification and marketing of seed are governed by the Fodder Plant Seeds Regulations 1993. Basically, this places the seed producer under an obligation to ensure varietal purity, freedom from noxious weeds, the satisfaction of a minimum quality standard, and uniformity of marketing. Obviously, a quality-conscious company has to select competent growers who use suitable fields, and must implement controls throughout all aspects of the production process, such as monitoring the growing crop, checking the harvesting, drying and cleaning of seed, and determining its purity and germination level. Only if the required standards are met can a Certificate of Purity and Germination be issued.

The minimum criteria governing the issue of a Test Certificate have been laid down by the EEC, but in the UK there is a higher standard called the Higher Voluntary Standard (HVS). Both the EEC and HVS standards require a minimum germination level of 80% in a seed sample of perennial rye grass, but minimum purity and weed levels are higher for HVS at 98% than for EEC at 96%.

However, some breeders go even further and realise the demands made of modern sports and amenity turf, and realise that grounds professionals require an assured supply of seed of a consistently high standard. For example, we have for several years operated a policy standard that is higher than the HVS. This is appreciated in particular by managers responsible for high quality turf, such as golf greens, bowling greens and turf nurseries, who need the assurance of higher quality if the risk of problems - and subsequent loss of revenue - is to be minimised.

We have incorporated Product Quality into our overall quality management system (QMS), so that procedures and results can be rigorously implemented and checked in a thoroughly consistent manner. Our quality control policy aims to achieve a germination level of at least 90%, and a purity level considerably in excess of the minimum standards; indeed, 90% of the seed we produce has a purity level in excess of 99%.

So how is this achieved? We operate a policy of 'zero zero' testing, designed to ensure that quality is maintained at two key stages of the production process: the production and cleaning of the original seed, and the formulation of the final mixtures.

In the first stage, grass is grown for seed production by approved growers, who are carefully chosen for their ability to produce yields of high quality and quantity. Samples are taken of the cleaned seed and are tested at a laboratory licensed by DEFRA. If the sample passes these analyses, then the grower is certified as producing seed carefully at our warehouses at Bury St Edmunds.

The second stage of the zero zero process begins when seed is mixed at our specialised mixing plant, in strictly regulated proportions. Again, samples are tested by a licensed laboratory. This ensures that the zero zero standard is maintained and that mixtures are free of any undesirable seed species.

This procedure also gives complete traceability throughout all stages of the production process, so that if any areas of concern arise, they could be checked back to source.

Under the rules and regulations governing seed production and marketing, all mixtures offered for sale have to carry a green, official mixture label from DEFRA, describing the varieties and mixture details. The information printed on the label is mandatory, and refers to the identity of the seed species used in the mixture, the variety names, their percentage by weight, the month and year of production and other basic details.

In summary, all those involved in the challenging task of creating a top-quality playing surface need as much information as possible, and they appreciate the need for the highest quality standards throughout. If greenkeepers and groundsmen can confidently select seed that meets or exceeds these criteria, then they will have the best chance of success. And so will the players who perform on the results of their efforts!