

With such a wide range of grass types and varieties on offer, careful selection pays dividends

Match grass to your land and management system

Plant breeding companies have invested millions in developing new grasses that deliver yield and quality benefits, are better for the environment and are able to cope with the vagaries of the British weather. Tailor-making a grass seeds mixture to your land and farming system has never been so easy. But selecting the right types of grass and varieties does require a bit of thought.

text Sara Gregson

The grasses that cattle graze today are very different to those grown even 30 years ago, as plant breeders worldwide have developed varieties with higher yields and improved nutritional characteristics, that use nitrogen more efficiently, are more disease resistant and tolerate more extreme growing conditions.

These new grasses have the potential to drive profitable milk production when well managed – confirmed in DairyCo's recent benchmarking report. This found that grass-based systems achieve the highest net margin in pence per litre compared to other systems, largely due to high grass utilisation and a reliance on home-grown feeds. They also play a large part in successful high output operations when fed as conserved forages.

Reseeding a fifth of the farm each year is a good way of introducing new grass genetics. This means most fields will be rejuvenated as the ley comes to the end of peak production and when native, unproductive species start to take over. Also, only 20% of the pastures will be out of action at any one time, usually in the autumn when many cows are starting to be housed at night.

Right choice

But what is the best way to decide which grasses to plant? With 99 varieties of perennial and Italian ryegrasses on the Recommended Grass and Clover Lists alone, the choice can be bewildering.

"Deciding what the sward needs to deliver to the cows and to the business is the best place to start," advises Oliver Seeds' Rod Bonshor.

"Producers with spring calving herds will want to use very different types of grass to those relying on a range of conserved forages to produce winter milk.

"The former will be looking for varieties with good grazing characteristics, which produce persistent and dense swards that can withstand trampling. They also need to have a high sugar content and start growing early in the spring.

"The second group will require high yielding grasses and clovers that can produce a high protein and fibre content to balance other high energy silages being fed like maize.

"Cutting leys are usually grown on fields away from the farm, while cows tend to be grazed close to home, so the mixtures should reflect this.

"Some species will do better than others



Rod Bonshor: "Reseeding benefits should easily outweigh the cost"

in certain conditions. Timothy doesn't mind getting its feet wet, while cocksfoot's extensive root system means it copes better in drought."

Capitalising on the strengths of different grasses can help spread the risk of unusual weather. For instance, tetraploid ryegrasses have good winter hardiness and came out of the previous two harsh winters better than many other ryegrasses.

Grass seed prices are likely to be 50% higher this year due to low global supply and increased demand. Do not let this put off any reseeding plans, as the benefits of introducing new seeds still far outweigh the cost.

"A £20 rise in the cost of an acre of grass seed adds just 82 pence to the cost of producing one tonne of grass dry matter," Mr Bonshor explains.

"However a 20% fall in grass yield due to tired, worn out pasture, could reduce milk output from grass by more than 50%. This has significant cost implications way above the increase in the price of grass seed."

Different types

About 80% of the grass sold in the UK is perennial ryegrass, but breeders are improving other grass types too, as they too have much to offer UK producers.

For example Donata, a new cocksfoot, has been bred with smooth leaves. Previously, this species has always felt hairy and coarse due to the presence of silica in its leaves, and animals would often avoid eating it. But breeders at DLF Trifolium have managed to 'remove' the silica to produce silkier leaves.

Its extensive rooting system helps keep an open soil structure and can reach down deep for water in times of drought.

It copes with extreme conditions such as cold winters and waterlogged soils, and yields well with less nitrogen fertiliser than perennial ryegrass. The seed is also currently cheaper than ryegrass.

Breeding success

Festuloliums are another breeding success story. These crosses between fescues and ryegrasses have created varieties with the beneficial traits of each parent species – combining high nutritional quality, with good winter hardiness and stress tolerance.

For example, Perun, a meadow fescue Italian ryegrass cross has high yields, is a great companion for red clover and hybrid ryegrass and is very drought and stress tolerant.

"Once you have decided on the type of grasses in the mixture the only place to go to select varieties is the Recommended Grass and Clover Lists," says Mr Bonshor.

These lists are drawn up after rigorous testing carried out by NIAB TAG. The booklet, which is funded by merchants and retailers who participate in the Grass Levy Scheme, is invaluable for farmers looking for independent evaluation of the varieties on the market.

"For spring sowing this year, producers should still be looking at the 2011 List, and not wait for the new one to come out this May," he adds.

"Any new varieties listed for the first time are likely to be in short supply in their first year.

"For example the hybrid ryegrass Tetragraze, which has the yield potential of its Italian heritage but derives high quality leafy re-growth from its perennial ryegrass parent, was new last year but there was little seed available.

"There is more stock this year but early ordering will secure this and other good varieties."

Grass can be a crucial element of a dairy farming business. Swards that have been established and managed well will produce high quality grazing and conservation crops that can contribute significantly to the bottom line.

"So it is worth investing time and effort in choosing and buying new varieties that suit the farm and not plumping for 'any old mixture' for every field because it seems cheap," adds Mr Bonshor.

"Discuss your needs with your seed supplier – many, like us, can draw up bespoke mixtures to suit precise requirements." |