

Spread the risk with alternative forages

Producers are opting a range of different forages for insurance against changing weather patterns and to mitigate difficult grass growing conditions. And they are also finding other benefits.

TEXT SARA GREGSON

Growing grass for grazing is extremely difficult for one Shropshire-based producer. Andrew Dale's 360-cow unit, which comprises 204 hectares in Yockleton near Shrewsbury, sits on a gravel loam that's quick to dry up each summer. It's not a grazing unit. So, instead, Andrew concentrates on growing good crops of grass, maize and lucerne for cutting. The herd, Holstein Friesians crossed with Fleckvieh and Swedish Red, produces an average yield of 10,500 litres of milk at 4.1% fat and 3.35% protein. All cows are fed a

diet comprising: 15kg maize silage, 15kg grass and 6kg lucerne, with 5kg of blend and 1kg of wheat. Around 49 hectares of maize has been grown on land furthest from the farm for the past 25 years. Andrew is particularly pleased with the lucerne, which he has grown for the past seven years. "During the 2018 drought, the fields with the deep-rooted lucerne were the only ones that remained green. It is low cost too. Being a legume it needs no fertiliser and it is never sprayed," he says.

Fodder beet: the crop fills a forage gap and is also a tasty treat for cattle



In May 2019, a mixture of 73% Fado lucerne with 18% Laura meadow fescue and 9% timothy, was drilled at a rate of 27kg/hectare, at a cost of £6/kg. “The grasses grow along the bottom of the crop, smothering any weeds and helping prevent small stones being picked up by the contractor’s forage harvester,” explains Andrew. Lucerne is cut first, during the second week in May, with care taken not to mow below 60mm, to prevent damage to the crown. Grass is cut second, but picked up first. The lucerne is picked up after a two-day wilt.

The grass and lucerne are placed side-by-side in the clamp and the second cuts of each crop are placed on top. The final three cuts of lucerne are baled and wrapped.

Nutritional analysis for 2019’s lucerne silage revealed 39.3% dry matter, at 11.8 MJ ME and 22.1% crude protein – making it an ideal complement to the high starch maize silage.

“Lucerne consistently yields between 12 and 13 tonnes of dry matter per hectare,” says Andrew. “It is also a low-maintenance crop and can persist for up to six seasons. I may grow a larger area in the future and buy in maize from neighbouring producers.”

Fodder beet

A different forage crop has been grown at Bicton College, in east Devon, and it’s been fed to 55 overwintered cross-bred milking cows and 150 dry cows and heifers, for the first time this year.

Two hectares of Bangor fodder beet was drilled in April 2019, into a free-draining, sandy grass field that had been sprayed off, ploughed, limed, cultivated twice, and power harrowed, with nitrogen applied to the seed bed at a rate of 105kg N/ha. Three herbicide sprays were also applied to control weeds during the first eight weeks.

“We have grown forage rape and stubble turnips separately in the past, but the fodder beet fills the winter gap in grass growth and provides much higher energy at around 12 MJ/kg DM ME,” says farm manager James Coumbe. “We started to graze it in late September and the cows love it. It is really palatable and digestible, and it has helped push the litres up and given the cows a longer ‘tail’ to their lactations. Milk quality now sits at 4.96% fat and 4.12% protein.”

The Bicton herd is managed on a low-input-low-output system with the cows averaging 5,000 litres of milk and housed for just three weeks each year.

“We chose the site to grow the fodder beet carefully to prevent soil run-off and offer the crop to the cows behind an electric fence. The cows can also access grassland, where they can graze or lie down,” says James. “It is important to introduce the cows to the beet slowly to prevent acidosis. We increase access by 1kg a day up to a maximum of between 7kg and 8kg per day. The cows receive maize and grass silage in the yard at milking and a small amount of concentrate in the parlour.”

Oliver Seeds’ John Harris offers agronomy advice to James on his fodder beet and says that, in future, he would recommend the use of fungicide, a foliar feed including boron, and the addition of sodium in the crop nutrition plan. Flea beetles and aphids can also be a problem in some crops.

“Fodder beet is an expensive crop to grow,” says James.



Andrew Dale, producer:

“Fields with lucerne were the only ones that stayed green in 2018”

“But high yields, of up to 18 tonnes of dry matter per hectare, brings the cost per tonne of dry matter right down. As a first time grower I am really impressed with it.”

Hybrid brassica

Staffordshire-based producer Trevor Mycock found himself short of forage after the drought of 2018 and so grew a forage brassica called Spitfire, from DLF and supplied through Agrovista. He sowed the seed in August, immediately after harvesting wheat. Spitfire is a modern rape cross kale that achieves a high dry matter yield per hectare. However, with a low dry matter stem and good leaf-to-stem ratio, it is particularly digestible to livestock.

The crop was harvested and fed fresh to the milking herd in a TMR where it replaced grass silage. It was chopped to between 40mm and 50mm, and added at a rate of 15kg per head. The cows’ yield increased by 3.5 litres a day within three days of feeding it.

Trevor reduced the amount of 28% protein blend he was feeding by half, from 8kg to 4kg. This performance continued while the Spitfire was being fed for two months, starting in late February and carrying cows through until turnout.

“It will definitely be a permanent fixture in our crop rotation and we will be putting it in after maize in future, as well as wheat,” he says. “It is so much better than seeing land lying idle and, as well as plugging a forage gap, it also helps to prevent run-off and soil erosion.” |



James Coumbe, farm manager:

“Fodder beet fills the winter gap in our unit’s grass growth”