

Supplementing rations to combat falling intakes is essential

# Adding molasses offers heat-stress 'insurance'

Introducing molasses to one Somerset-based herd's ration has helped to sustain milk yields and cow fertility, even during spells of hot weather. This year's dry summer has served to remind many producers just how damaging heat stress can be to cow performance – both in terms of milk production and fertility.

text **James Marshall**

In summer 2017, Ross Edwards, who manages the dairy herd at Velcourt's Manor Farm near Frome in Somerset, noticed a significant drop in cow pregnancy rates during a spell of hot, humid weather.

"It was obvious that some of the cows were suffering from heat stress and, as a result, feed intakes decreased," he says. "Because cows weren't eating enough, their energy levels dipped and pregnancy rates dropped by between 9% and 10%. So, this summer, we wanted to have some extra nutritional support in place to help maintain good intakes, boost energy levels and support fertility during periods of hot weather. And adding molasses to the ration was one possible solution."

## Sweeter TMR

Ross consulted with Velcourt nutritionist, Robbie Taylor, who recommended

introducing molasses into the cow's feed to improve the palatability of the TMR ration, as well as providing a boost to blood sugar levels.

Molasses was fed at a rate of 1kg per cow per day. "And we now have a 32-tonne, purpose-built molasses tank on the farm, which takes one tanker delivery load from ForFarmers and holds enough for about 60 days.

"Adding the molasses to the TMR has made it smell sweeter and more palatable, which helped to sustain feed intakes during the tail end of that summer, despite the hot weather conditions."

As a result of this success, Ross continued to use molasses this summer, adding it to the ration from May onwards.

"The herd's fertility performance is now back where we want it to be and I will continue to use molasses in the cows' feed at key times of the year when I



Ross Edwards: "We add molasses when temperatures rise as an insurance against reduced intakes due to heat stress"

identify a risk of heat stress," he says. "I think it acts as an insurance policy, in case the weather gets too warm, and it definitely helped to sustain feed intakes and cow energy levels this summer.

As well as improving the palatability of the ration, he is sure that the sugar content of the molasses also helps. "As we progress through the year, cows move from eating early-cut to later-cut silage. The latter has lower sugar levels and I think that it makes sense to give sugar intakes a boost as the year goes on."

## Multi-cut approach

Ross is responsible for managing the 550-strong Holstein Friesian herd, as well as eight full-time members of staff, at the 400-hectare unit. Cows are milked three times a day and the herd's average milk yield is 11,000 litres, with 3.8% butterfat and 3.15% protein.

Sugar boost: molasses improves palatability and energy levels



Tempting ration: the TMR is sweeter and more palatable





*Adding molasses: supplementation helped to maintain intakes during times of heat stress*

“The cows are housed all year round and this means that we can carefully monitor intakes and make sure that we are getting the best out of them,” he explains. “Most of the farm’s soil is heavy clay, which isn’t ideal for grazing, but dry cows do go outdoors and grass is still a vital part of our system.”

Around 80 hectares are down to maize and 60 hectares are used for growing cereals. The remaining 260 hectares are down to grass, for making silage and grazing young stock.

“We are always pushing to take as many cuts of grass silage as possible,” says Ross. “We took four and a half cuts in 2017 but, being on heavy clay, we were delayed this year due to the wet weather conditions and didn’t take our first cut until early May.”

“First-cut yield was around eight tonnes per hectare, and second cut was around 10 tonnes. But, due to the recent hot and dry weather, we are still waiting to take

a third cut. It will probably be the second week in September before grass growth is good enough to take this third cut.”

### **Balanced ration**

Grass silage provides a much-needed source of protein to complement the maize and wholecrop, that form the rest of the herd’s ration.

“We feed a TMR comprising 20kg of maize silage, 11kg of grass silage, 5kg of wholecrop and 14kg of concentrate,” explains Ross. “We milk the cows through a rapid-exit parlour, so we have no time for in-parlour feeding. Everything is premixed in a wagon to improve palatability and digestibility.” Ross works closely with ForFarmers. “The company provides all the herd’s blend and carries out fresh grass and silage analysis for the unit. And, if I have any feed related queries or problems, it is usually my first port of call.”

Due to the negative impact that the

heat has had on forage availability this summer, ForFarmers’ Charles Delf was on hand to suggest and source some high digestible fibre concentrate – soya hulls in this instance – to supplement the young stock ration.”

Ross uses the farm’s wholecrop as a ‘back up’ crop and will decide, based on the performance of his maize, how much will be fed to the cows each year.

“I will assess our maize during the summer and see how it is performing,” he explains. “If it is looking good, then we will combine more cereals and feed grain as concentrate. If maize isn’t performing well, then we have the option to wholecrop more cereals and feed it to the cows in an effort to make up for a poorer maize silage yield.”

And, for the foreseeable future, Ross will continue to feed molasses as the ‘go to’ solution to combat heat stress during the summer and falling grass silage sugar levels. |