



RUMINANT TECHNICAL NOTE – JANUARY 2010 IS YOUR MAIZE FEEDING AS PLANNED? CHRIS SAVERY – MGA RUMINANT CONSULTANT

It is now over 4 months since some farms harvested 2009 maize and rather less for those who were waiting for maturity, or rather less 'stay green' characteristic. Whichever the case, the feeding of the maize silage should now be at its best, with the only real question being whether maize inclusion is at an optimum. The concern over freshly ensiled maize is past, the weather is cool / cold and the maize should be well integrated in the diet.

Maize needs time to settle

Although I and others have encouraged members not to start freshly ensiled maize for at least a month, this is often too big a request. But, it is said for good reasons and some would say the wait should be even longer! It is all about trying to get the maximum utilization from the crop that has taken time and effort to grow. In practice, the major limitation for many is that maize is not available in the diet for the full 12 months. Hopefully, with the size of last year's crops the gap will be shorter, but now is the time to plan for more, if appropriate. Cereal wholecrops can also help over a shortfall.

Autumn is a time of too many changes

Most diets should now be well settled and this is the main reason for steadily improving milking performance in many herds. For many herds the autumn is a time of too many changes, made worse this year by extended grass availability. It takes time for recommended diets to settle, actual forage intakes to be established and the supplements to the diet refined according to the cows signs and performance.

Supplementing fresh maize

Feeding the maize silage in a relatively fresh state undoubtedly restricts performance, largely through the difficulty of rumen bacteria accessing the starch. The extent to which this

is a problem is not identified easily with our standard analyses. Partly for that reason, it will remain desirable to avoid feeding maize silage for 4 – 6 weeks. Trying to add extra starch or sugar sources to compensate for fresh maize may not be simple and may increase the risk of acidosis – particularly if the diet management is not good.

Don't be fooled by the undoubted benefit of adding fresh maize to a grass silage only diet. That just demonstrates the first part of what is missing.

MGA working with LINK project

It is easy to point out some of the aspects of maize silage that we need to do better over, but quantifying some of our concerns has been difficult. It is good to see that updating of the maize silage evaluation is to go ahead in a further LINK project, with the MGA involvement and hopefully we will move nearer to a more precise metabolizable energy (ME) estimation and to quantifying starch availability.

Clamp management

With the low or very low ambient temperatures, some of the excuses for aerobic deterioration may come home to roost. If clamps are heating and spoiling, they are either being used too slowly (inappropriate clamp face for the number of stock) or are poorly ensiled, or both. You will never get the best from maize silage if it is warm, or deteriorating when removed from the clamp. Mycotoxins continue to be raised as a potential concern. Visible identification of a problem feed / forage is unfortunately difficult. Whilst it is apparent that there are some responsive problems, my experience suggests that they are only occasional.

p.t.o

Action now - Be critical of the stock performance against the diets presented, it is better to make changes now, if necessary.

- Check you are using appropriate proportions of maize and other forages for the stocks available.
- Review the level of supplementation, with regard to level of production, fertility and health – aim to make quality forage count.
- Protein prices have not eased much – is there scope to save / reduce cost, or have you cut back too much?
- Metabolic upsets should be at a minimum – after months of indoor feeding, attention to detail in diet management can slip.
- High maize diets or high starch/sugar diets may need reviewing where maize degradability will have increased over the winter.
- Minerals should be 'in date', and the need for salt, limestone or buffer should be re-checked.
- Diet hygiene often deteriorates when under pressure – check that forages and straights are handled cleanly, troughs are clean and that diets offered are free of mud / dung contamination.
- Need for water has been made clear in the recent cold weather – check the supply is good and troughs are clean and full.