



Experts agree it has been a very challenging year for maize. However, the season is now drawing to a close and in the last article in our Maize Matters series we look at the growing importance of a new method of evaluating crop quality and offer some tips on preservation.

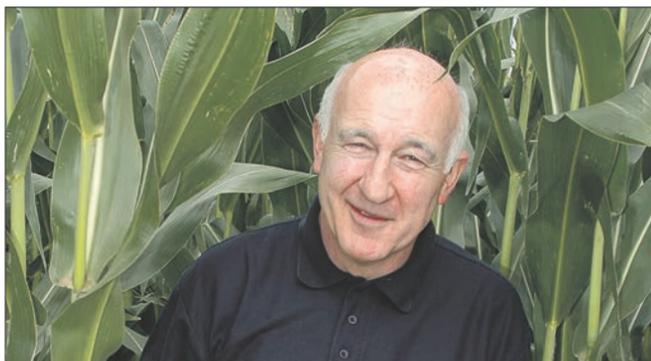
# Measuring quality of feed using cell wall digestibility levels

Livestock farmers are placing increased emphasis on using cell wall digestibility (CWD) levels as a measure of feed quality, according to Brendan Paul of Agrii.

"There is a limit to how much yield and quality can be obtained from a maize plant cob," says Mr Paul. "Therefore, it is a natural progression to start paying more attention to the plant's green matter, particularly on farms where high levels of maize are included in livestock diets.

"While D value relates to the digestibility of the whole plant, CWD is based on an analysis of the leaf and stem only," he says. "It is expressed as a percentage, typically ranging from 50-60 per cent. A variety with a CWD of 50 per cent plus can be considered more digestible and should break down more quickly in the rumen, helping to maximise dry matter intakes."

When looking at this year's general performance, Mr Paul says the latest results from Agrii trial plots highlight the



Varieties with CWD of 50 per cent plus are more digestible, says Brendan Paul.

exceptional performance of Salgado (KWS). The early hybrid variety had the highest yield recorded as *Farmers Guardian* went to press, with freshweight at 49 tonnes per hectare (20t/acre). Meanwhile, it looks as if Kentaurus (KWS) will emerge as the leading variety in South West England.

## Do not judge

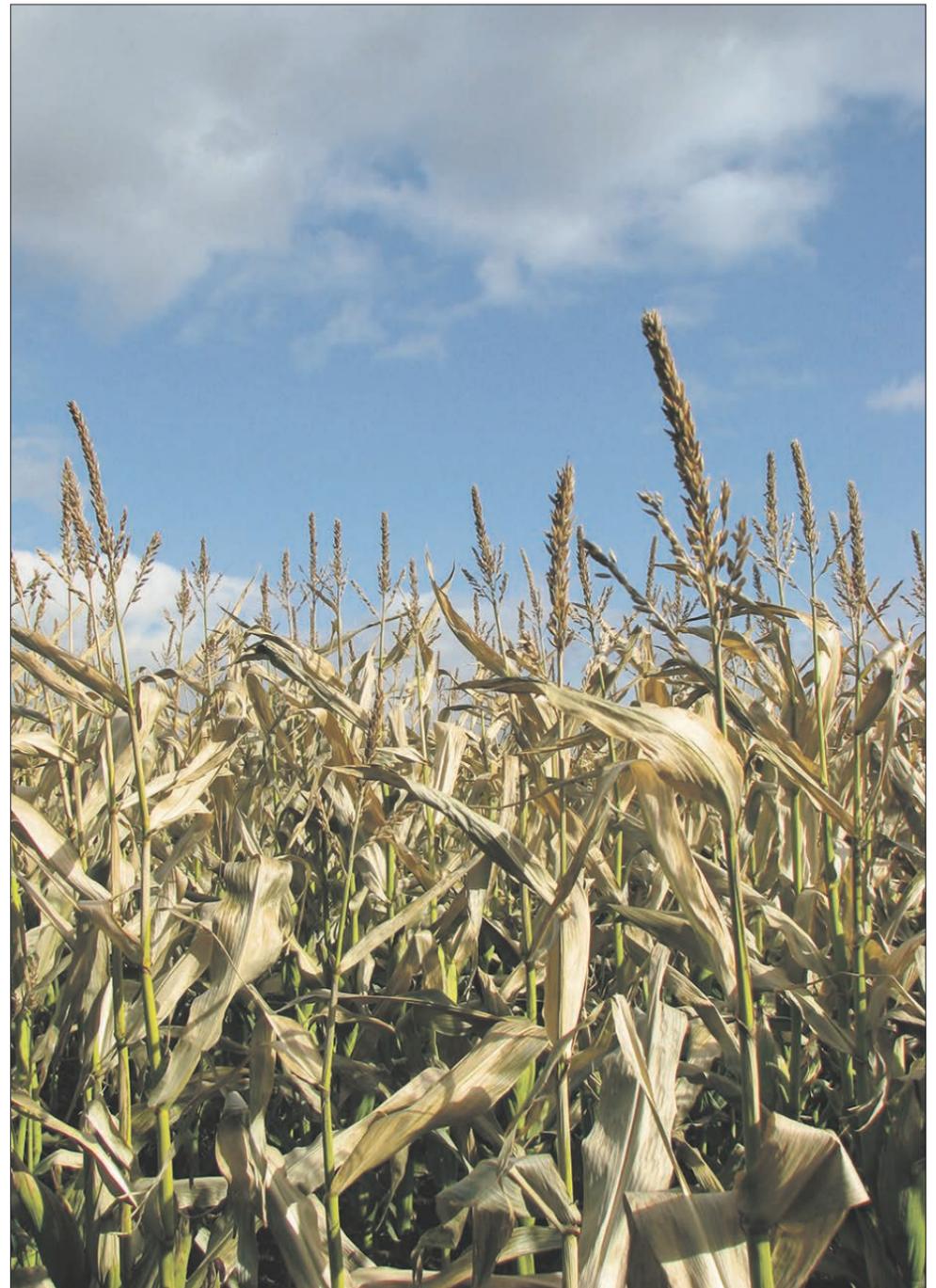
John Burgess from KWS advises growers not to judge a variety on this year's performance alone.

"In general, I expect maize yields to be down by an average

“There is a limit to how much yield can be obtained from a maize plant cob

**BRENDAN PAUL**

15-20 per cent," he says. "We have experienced the worst growing conditions since 2007,



Growers are advised not to judge a variety on this year's performance due to the challenging conditions.

which was another very poor year for maize. It's hard to assess varietal performance under these conditions, although I think early types will become more popular in the future, due to their increased flexibility."

Mr Burgess advises growers with maize still to cut to aim for a longer chop length of 20-28mm to increase the crop's buffering capacity at feed-out. A longer chop will also reduce effluent run-off, which is expected to reach high levels, as crops will be immature and therefore low in dry matter content. It is inevitable crop quality will be adversely affected, he warns.

## Compromised

"The late and difficult growing season means crops will be coming off the field earlier than planned, to make way for the drilling of winter cereals. Under these circumstances, energy density is likely to be compromised and the maize will contain significant quantities of non-digestible fibre, resulting in lower D values. It is important to take every opportunity to maximise crop feed potential, and it is certainly worth using an additive, to help with fermentation."

## CLAMP MANAGEMENT

ONCE the crop is safely in the clamp, growers should leave it undisturbed for at least six weeks, says Mr Burgess.

"The temptation to feed maize soon after harvest must be resisted. Opening the clamp too early prevents the anaerobic process needed for correct fermentation and heightens the risk of spoilage and mould growth," he says.

Maize silage should be analysed in good time, to assist with ration formulation.

"We are now entering an uncertain period, as we have no knowledge of how the crop will eventually feed-out. I sympathise with farmers in marginal areas, many of whom have struggled every step of the way since their crops were drilled.

"But I can predict, with some certainty, most maize silages will be more acidic, compared with other years. Livestock diets will need to be put together with extra care, to minimise the risk of acidosis."

“In general, I expect maize yields to be down by an average of 15-20 per cent

**JOHN BURGESS**



## DISEASE PRESSURE

HIGHER than average disease pressure this year was just one of the many problems facing growers, according to Mr Paul, but quick preventative action proved successful in most cases.

"Eyespot has been rife and

I even heard of an infected crop in Norfolk, which is unusual. As most crops were shorter in stature than normal, a timely fungicide spray gave good control and losses were kept to a minimum.

"If the 2013 growing season is anything like this

one, careful monitoring of the crop for fungal disease should pay dividends. It is worth noting the new Limagrain variety Fieldstar, showed much lower susceptibility to eyespot, compared with the other early varieties we tested," he says.