Understanding Winter OSR Leaning & Lodging

The wettest April on record and unsettled, stormy, wet weather throughout May and most of June have added to a series of unusual weather factors causing more winter OSR leaning and lodging in some parts of the country than most of us can remember since 2006.

Just like that season, excellent autumn establishment meant more vigorous, faster developing varieties, in particular, going into the winter with higher plant populations and greater above ground bulk than normal. This situation was compounded by an almost complete lack of winter this year to leave many crops entering the spring very lush and, where nitrogen was not limiting, in many cases with a noticeable imbalance of above to below ground growth.

High plant density in narrow rows

The very warm March exacerbated the dryness of the winter, causing earlier maturing varieties from all breeders to move rapidly into stem extension, again at the expense of root growth. This also played havoc with the timing of spring growth regulatory fungicide spraying for some.

OSR with no tap root in unstable soil

Pre harvest management will be important

This season more than ever pre harvest Roundup desiccation will be must for a lot of OSR growers. Those growers with early developing, high yield-potential crops which are leaning from the roots will need attention to detail to get full coverage but should still achieve good results as only completely snapped stems would prevent glyphosate translocation. Where the prolonged flowering period has caused a range of pod maturity within the canopy Roundup treatment will be key to ensure easier, faster combining.

Oilseed Rape Desiccation Tips

It is essential to time the Roundup application correctly. Download a timing guide from the home page at www.monsanto-ag.co.uk:

- Use a Roundup brand selecting the lower rate of 1080g/ha for crop desiccation only or the higher rate of 1440g/ha for perennial weeds. Roundup brands are rainfast in 4 hours.
- In hard water areas consider the use of a suitable water conditioner or ammonium sulphate.
- Good penetration of the canopy needs water volumes to be kept up to 200-250l/ha and using low drift pre-orifice nozzles, air inclusion nozzles or angled nozzle technology such as the GuardianAIR™ Twin should provide low drift combined with maximum penetration.
- Keep forward speed down and pay close attention to boom height, especially over leaning or variable crops.
- Spray in the early morning when humidity is high rather than in the heat of a hot day.
- Desiccation of upright, even crops will take at least 21 days – some of this years crops could take up to 4 weeks to dry the stems down thoroughly. Patience will be needed!
April Storm Exposure

These exceptional conditions left many tall, bulky crops – some rather thicker and shallower-rooted than ideal – exposed to the April storms. With unstable soil caused by the spring monsoon, it really has’t been surprising to see a number of fields showing root lodging – large intact, strong-stemmed plants moving in the soil rather than conventional stem bending or breaking.

Strong stems moving at the root

Generally speaking, later and slower developing varieties seem to have been less affected than most. But there are big local differences, with even the stiffest, most lodging resistant and latest maturing varieties not proving immune.

Slower-developing and later-maturing crops which survived the April storms with less immediately obvious damage have steadily become affected by similar lodging as their increasing bulk has put them under growing pressure from persistent rain, wind and structural soil weakness.

Good light penetration and air circulation remains in ‘leaning’ crops

Yield potential remains high in pod filled canopies

Yield Potential

Thankfully, the yield potential of most crops looks to be high, with few, crops having kinked or significantly damaged stems. And most with a degree of leaning or lodging appear to have reasonable light penetration and good air circulation too. So pod fill can be expected to proceed unhindered.

Some crops will, almost certainly, give more harvesting headaches than we have experienced for several years. But since the season may not favour later developing varieties as much as recent years, this could well be more than compensated for by their yields. Pod shatter resistance could also be a very useful characteristic this year to minimise shedding in the run up to and at harvest.

Given the particular benefits provided by vigorous, faster-developing and earlier maturing varieties under most northern European conditions, this season is again likely to underline the importance of growing a mixture of variety types and maturities to minimise the growing risk from an increasingly uncertain climate.

Matthew Clarke, Northern Europe OSR breeder

If you wish to discuss any specific concerns or thoughts on variety choice the Dekalb team would be happy to hear from you.

Please email info@dekalb.co.uk or contact the Dekalb Technical helpline on : 01954 717575