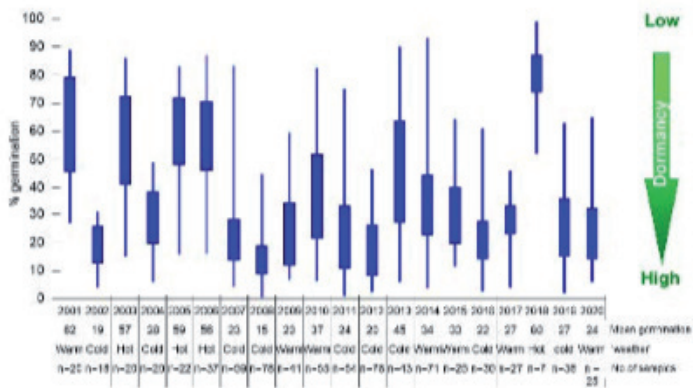


NEW SEASON POINTERS

Rains in August interrupted harvest and have impacted on cereal quality, but did create favourable conditions for oilseed rape establishment and early weed control.



The annual assessment of blackgrass dormancy carried out by ADAS has indicated that dormancy in seed shed this summer is 'high' with an average germination of 24%. The samples included in this survey were collected from 25 different areas in early July from blackgrass plants in winter cereals.



Weather conditions during maturation influence the dormancy of blackgrass. This year, the blackgrass had flowered and ripened by July 10th in the south. Weather conditions during the ripening period varied regionally with significant amounts of rainfall in the north and west and high temperatures in the south. As ever, the tests showed a wide range of dormancy indicating that local conditions for seed maturation are still

the overriding factor. Although the average figure suggests dormancy is 'high', it might be equally well described as 'typical' or 'normal', as over the period of testing, the majority of results fall within a similar pattern to this year's results.

N.B. Dormancy only applies to seed produced and shed this year. Seed already in the soil from previous years will have no dormancy. Consequently, the impact of dormancy may be minimal depending on the amount of seed already in the seedbank. The weather-enforced delayed winter planting and increased spring cropping, generally lowered grass weed levels in 2020. This could mean that weed seeds in the soil from previous years may be a more significant contributor to the weed risk this autumn. The key factor affecting grass weed germination this year, as ever, will be moisture availability. Following the near-biblical rainfall in some areas in mid-August, conditions may well be conducive to promoting a relatively early 'flush' of weeds and 'stale seedbeds', if managed well, could make a critical contribution to lowering grass weed populations.

Germination from seed shed this season will be slow even where soils are moist — 90% emergence will occur by 60 days after drilling. Where there are high blackgrass populations consider burying weed problems by ploughing (but did you plough last year?). Good ploughing will bury this year's shed seed to below the germination zone (top 5cm). But cultivations will bring up weed seeds from depth and these will germinate rapidly; buried seed will remain in the seedbank but will decline by 70% per year.

However, where blackgrass populations were low in the 2020 crop, ploughing may well bring up more seeds than it buries and shallow, surface cultivations will be more appropriate. These, of course, have to be consistent with correcting any soil structural problems in the cultivation zone caused by the difficult establishment conditions last autumn and spring.

A robust pre-emergence herbicide 'stack' will be a key element in suppressing grass weeds. Your ProCam agronomist will have all the latest information on the appropriate herbicide options to suit your individual field and weed scenarios.

OILSEED RAPE

AUTUMN PESTS



The main threat to the successful production of oilseed rape in recent years has been Cabbage Stem Flea Beetle (CSFB). At the time of writing the reported incidence of adult CSFB damage in crops was relatively low, but this can and will change quickly as the beetles return from their summer resting period. Currently available insecticides are limited in their efficacy. The level of resistance to pyrethroid insecticides is widespread and increasing. Their use should be both targeted and restricted to avoid increasing resistance further. Applications should only be made once damage has reached threshold levels. Applying pyrethroids with certain adjuvants and later into the evening have been shown to improve control. Check with your ProCam agronomist for the latest information on optimising CSFB control.

However, while the focus is on CSFB other pests are also a potential threat to oilseed rape, Turnip sawfly is a sporadic pest, particularly in mild autumns, typically transferring from other brassica crops e.g. stubble turnips. The black caterpillar-like larvae can cause severe and dramatic defoliation in localised areas but occasionally across the entire crop. Fortunately, pyrethroid insecticides are still a very effective option on this pest.

Also problematic is aphid control, notably *Myzus persicae*, the vector for the yield robbing Turnip Yellow Virus (TuYV). These aphids are highly resistant to both pyrethroids and pirimicarb and require the use of a limited number of alternative insecticides for effective control. Several high-performing hybrid varieties now incorporate TuYV resistance. Treatments to conventional, susceptible varieties should be applied as soon as aphids are found in crops and especially if this occurs in the early (4-5 leaf) stages of crop development. TuYV has been shown in trials to have the potential to reduce yields by up to 30%. Symptoms of infection are not easily diagnosed and are easily confused with many other oilseed rape deficiencies and disorders.

With all the focus on insect pests, don't ignore the potential impact of slugs. The wet conditions in August will have provided ideal conditions for a recovery in numbers after the dry conditions earlier in the year. There may be some limited availability of metaldehyde, but for the most part control will revolve around the use of ferric phosphate pellets.

OILSEED RAPE

AUTUMN NUTRITION



Weather conditions in August provided adequate soil moisture to encourage a considerable acreage of oilseed rape to be drilled. On-going weather has generally aided vigorous and rapid crop establishment. The challenge now is to maintain and further develop this early growth. Addressing weed control will be an early priority, not least control of volunteer cereals, notably where crops have been sown after spring barley.

Encouraging rapid growth will allow the plants to tolerate the damage inflicted by Cabbage Stem Flea Beetle (CSFB) adults when they inevitably start to arrive in crops. Crop nutrition has a vital role to promote fast and sustainable growth if and/or when CSFB attacks occur.



ProCam trials have demonstrated that applications of foliar nutrients in combination with bio stimulants e.g. Canola Bio can increase root growth in oilseed rape plants when applied around the 4 leaf stage. Promotion of early rooting allows the plant to be more efficient at extracting nutrients from the soil and ultimately more resilient to weather extremes. Increasing root length density is strongly correlated with final yield.

Other nutrients important to oilseed rape in the autumn are Molybdenum (Mo) and Boron (B). Both have vital roles to play within the plant. Mo has a vital role in nitrogen utilisation within the plant. Boron is integral to the production of lignin, flowering structures and pollen production. A satisfactory supply is needed in the autumn when flowering structures are being developed. Autumn applications of Boron also help to promote improved shoot growth.

Discuss the various nutrient options with your ProCam agronomist to devise the appropriate nutrient programme for your crops and varieties.