



**PROCAM**  
AGRONOMY THAT DELIVERS™

Technical Update  
May '17

## May Monitor

**As May begins the time for key yield-influencing inputs approaches. For winter crops this is an ideal opportunity to influence final crop yield and quality**



Although many 'T1' fungicides will only have been applied in late April the 'T2' or flag leaf fungicide will soon have to be planned. Flag leaves will be emerging around mid-May onwards. The combination of robust fungicide mixtures and a cool, relatively dry April has reduced disease levels in most wheat crops - at least from leaf 3 upwards. Despite the drier conditions septoria lesions are still present on lower leaves and in close proximity to newly emerging leaves. There has also been adequate leaf moisture and rainfall to keep the disease 'ticking over' and maintain a potential risk of infection, especially on the more susceptible varieties.

Yellow rust, apparently well suppressed by the earlier fungicide applications, is still a major potential threat. The current races based largely on the Warrior 'family' along with the newer Kranich race are particularly virulent and will quickly flare up again if favourable conditions return.

The T2 fungicide needs to protect the flag leaf – the main yield forming component – into and through the grain-fill period

from flowering (anthesis) onwards. A key component of a fungicide mix at T2 must be the SDHI fungicide group. In trials in recent years the value of the SDHI group in either dry or wet seasons has been well proven.

**In AHDB recommended list trials the 5 year average yield response to fungicide is 3.2 t/ha ranging from 1.08—4.85 t/ha in the lowest to highest disease years**

Using a high loading of SDHI at T2 will improve persistence and effect throughout the grain-fill period. ProCam's own trials have shown that a combination of triazole, strobilurin and SDHI have produced a consistently high level of performance in terms of both disease control and yield when applied at the T2 timing. The inclusion of pyraclostrobin with a strong SDHI e.g. fluxapyroxad improves disease control, especially on the rusts and enhances the SDHI's effect on crop physiology. SDHIs in addition to their obvious disease suppressing properties have been shown to reduce crop stress, improve water-use efficiency and enhance the plant's ability to extract water from deeper in the soil profile. This has a direct benefit on crop performance independent of disease control.

The unpredictability of the UK climate means that there is no room for complacency or false economy at the T2 timing. A swing back to wetter conditions and a higher septoria risk would also suggest that a multisite inhibitor e.g. chlorothalonil is included with the T2 fungicide mix. This has the dual benefit of suppressing septoria sporulation but also crucially, helping to reduce developing more septoria tolerance to the SDHI and triazole fungicide groups. Make sure your crops are fully protected to maintain a healthy and efficient green leaf canopy throughout the grain filling period.

ProCam is pleased to announce and highlight the launch of the new ProCam website Logon at [www.procam.co.uk](http://www.procam.co.uk) to browse the full range of services that the ProCam Group can offer farming businesses. You will find details of the latest technical updates, soil analysis and nutrient planning, topical farming news, forthcoming events, product data sheets and weather reports amongst many other items aimed at helping you improve your farm's and product use performance.



# Winter Wheat



## Nutrition Spring 2017

Maintaining a healthy and efficient canopy relies both on fungicides to suppress disease and an adequate supply of nutrients. The dry conditions in April have restricted the plant's ability to extract key nutrients from the soil. Analyses of leaves are currently showing many nutrients are at below guideline levels even if soil analysis indicates a plentiful supply. Potassium is frequently being found to be deficient even on potassium releasing clay soils. Nitrogen, potassium (K) and magnesium (Mg) are particularly important to maintain a green leaf canopy. Mg is a central component of chlorophyll. K has a very important role in water regulation as well as nutrient movement around the plant. Sulphur is another macro-nutrient that is vital to ensure efficient utilisation of nitrogen and is a major component of proteins. It is an essential part of key amino acids that give bread making wheat its baking properties. Again, leaf analysis is frequently showing low levels even where sulphur fertiliser has been applied. Other micronutrients are showing low levels from tissue analysis. Boron is one element that is being increasingly found at limiting levels, especially on calcareous soils. Boron is important for the formation of grain sites and N metabolism.

ProCam trials in recent years have demonstrated yield benefits from including foliar nutrients with fungicides over and above those achieved from fungicides alone. These effects have come particularly from applications at the T2 and T3 timings. Keeping the plants healthy and well supplied with the correct nutrients appears to make the fungicide programme more effective. A tissues test ahead of the T2 timing will allow you to determine what, if any, nutrients are lacking and provide the basis for a tailored nutrient input to help your crops maintain optimum photosynthetic efficiency during the critical grain-fill period. Your ProCam agronomist will have full details of the appropriate sampling requirements and analytical services.

# Open Evening



## Varieties for 2017/18

An advance notice to save the date for a Chemega Trials Demonstration Evening on 22nd June 2017 at Sutton Benger, Chippenham SN15 4RU Starting at 4.00 pm

The evening will feature a tour of winter wheat and barley varieties and trials focusing on variety interactions with drilling date, seed rates and fertiliser, concluding with a barbecue. Contact your Chemega agronomist or the Chemega office on 01672 539591 for more details

# Spring Cereals



## PGRs Spring 2017

Although spring 2017 has given a cold start to many spring sown cereals there will be a surge in growth as the weather warms through May. This quick growth in warmer soils and longer sunlight hours can produce lush growth. There has also been a trend in recent seasons to increase seed rates to produce thick, competitive crops to suppress grass weeds. This is often the main reason why spring crops have been introduced into the rotation. The combination of fast growth and thick crops inevitably means that stem strength and root plate - the spread and mass of root per tiller - are weaker and smaller. Plant Growth Regulators (PGRs) applied at early stem extension can thicken and strengthen cell walls in the lower internodes as well as stimulating root development. A robust growth regulator programme should form a key part of spring cereal husbandry. Lodging will impact severely on yield potential will cause associated reductions in quality. Medax Max a combination of two anti-gibberellin components, prohexadione-calcium and trinexapac-ethyl, has wide flexibility of dose rate and timing in all spring cereals to suit your individual crop and field conditions. It is a standalone product but can also be applied with chlormequat if required. Your ProCam agronomist will have details of the appropriate PGR programme for your spring cereals this year.

# Winter OSR



## Late N Benefits

The case for late N applications to oilseed rape during the flowering and early post-flowering period has been established over a number of years. A series of trials by ADAS and Yara indicated that 40-50 kg/ha of foliar N applied at the end of flowering gave responses averaging 0.26 t/ha. Larger responses were most likely in years where earlier 'bag' N uptake had been compromised e.g. in dry springs. Arranging and applying large quantities of foliar N product is not always feasible or convenient. ProCam have sourced a methylated slow release liquid urea with a low use rate of 10 l/ha. Although supplying relatively small amounts of N this formulated product has been demonstrated in trials to produce increases in oil content of between 3-4%. It can be included with flowering fungicides or applied as a standalone product. Your ProCam agronomist will have full details of this new product which could facilitate a cost-effective opportunity to boost the gross output of your oilseed rape crop.