Maize Growers Association

MGA TIMES





Correspondence Address: Town Barton Farm, Sandford, Crediton, Devon. EX17 4LS. Telephone: 01363 775040 Fax: 01363 776938

E-mail: info@maizegrowersassociation.co.uk Website: www.maizegrowersassociation.co.uk

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WEED CONTROL ARTICLE IN THIS ISSUE

With maize drilling well under way and the weather in most parts of the country favouring a good establishment of the crop, Simon has set out in the enclosed article the best options for spraying the weeds this spring. We still have some copies of our weed identification and herbicide guide produced in 2007. The guide listed the sprays and the effectiveness of them on the most prevalent weeds and grasses that affect maize. If you have lost your laminated MGA Herbicide guide, there are still a few available from the MGA Office.

Chris Savery has written a very useful article on summer feeding and looking after the clamp to avoid spoilage during the warm s u m m e r we at her (hopefully!). He also looks ahead to this years maize harvest, which with any luck will be a lot less worrying than last years.

2009 MGA SMALL PLOT TRIALS TAKE SHAPE

The 2009 MGA Small Plot trial programme is well and truly underway, with the latest innovations in fertiliser, herbicide, fungicide and varieties all being considered.

Herbicide work will be conducted by North West Agronomy. They will look at the ever changing options for combating weed competition, particularly in relation to the all important first six weeks post crop emergence. Pre, Post and combinations of both will be considered, alongside different application rates to try and determine the most cost effective solution for members.



A full blown Nitrogen trial has been commissioned from NIAB, with the results hopefully being suitable for incorporation into the successful MGA Nitrogen Predictor decision support tool. In addition to the straight Nitrogen trial we have also commissioned Grainseed Ltd, working with Charles Murray at Harper Adams University College, to run a trial looking at the potential to use top dressed organic manures to apply some/all of the required nutrients for maize crops.

Fungicide work will look into the options to combat the increasing threat that



is maize eyespot. It is hoped that we can learn from Irish work to come up with suitable treatments, application rates and timings to avoid the rapid die back and poor maize that results from this folia disease.

The ever improving variety breeding programme, led by the British Society of Plant Breeders (BSPB) has prompted the need

for a further look at seed rates alongside maturity class, in the hope that information can be gleamed as to the optimum seed rate for each maturity class.

As in the past, results from these trials will be exclusive to MGA members for at least a year and will be reported at the annual MGA conference held in February next year.

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MAIZE DEMONSTRATION PROGRAMMES TO BE REPEATED AND EXPANDED.

With the financial help of the Environment Agency and the Catchment Sensitive Farming Delivery initiative, the MGA are delighted to be involved in the running of further on farm demonstration programmes across the country during 2009. The aims of the programmes remain the same as those run in two south west catchments last year, that being to provide growers with advice, via on farm demonstrations in each catchment, which will allow them to grow great crops of maize in an environmentally sustainable way.

The demo's will focus on the positive environmental aspects of maize, including its ability to use nutrients supplied by organic manures, as well as low volumes of agricultural chemicals needed to achieve success as compared to other crops.

With demo sites located in the southeast, the west midlands and the south west, the hope is that as many growers as possible can benefit from the events.

Members keen to know more should give Simon or John a ring via the office.



Farmers in the Axe catchment talk seedbed preparation with Simon Draper



For more information, please consult your Masstock contact or call Brendan Paul on 07767 310454

GORDON NEWMAN MEMORIAL SERVICE

On Tuesday 24th March John Morgan, along with the current and past MGA chairmen and members, had the honour to represent the association at a Memorial service in memory of Gordon Newman. The Chapel at the Royal Agricultural College was full to bursting for a service, organised by Ivor Bending and the great man's family, to remember and recognise Gordon's professional career. The congregation made up from the great, the good and others from British agriculture heard acknowledgements from many of Gordon's close friends and colleagues, including MGA council member Barrie Bryer. The chapel tribute was followed by refreshments in the main college buildings, allowing further time for reminiscence of time spent with such a character in a more informal surrounding. Well done to all concerned in organising such a marvellous tribute.

Although later than usual, the annual conference at Cirencester proved to be a great success judging from the comments received by delegates subsequently. A good range of maize related topics were presented by an eminent list of national and international speakers. The day was rounded off by an excellent visit to a "real life" biogas plant by kind invitation of Kemble Farms. The full conference papers are in the process of be-

ing printed and will be with all members in the next mailing.

MGA CROSSES THE BORDER!

Late April saw John Morgan talking to farmers in West Wales keen to learn how to grow quality crops of maize. The series of three meetings were organised by the Welsh Environment Agency and the Dairy Development Centre and focused on providing "in the field" advice to farmers, many of whom were new or still considering forage maize. Discussions focused on drilling date (soil temperatures were consistently 12 degrees C), soil structure and variety choice. Inevitably the use of manures and the need for additional fertiliser was also discussed. The hope is to make a return trip pre harvest in September to talk maize harvest and post harvest field management.

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GETTING NITROGEN RIGHT FOR MAIZE IN 2009

The number of members making use of the MGA Nitrogen predictor service has increased considerably this year. Reasons for the increase are no doubt linked to the price many paid for fertiliser last autumn, as well as the recent expansion of the Nitrate Vulnerable Zones. Feedback from users continues to prove interesting, particularly asking for clarification as to why N predictor recommendations are so different to those gained from the DEFRA Fertiliser Guidance for Agricultural and Horticultural Crops (RB209

The aim of this technical note therefore, is to review the factors you should take into account when considering how much Nitrogen to apply to your maize this year and to hopefully reduce the "confusion in this area".

The factors taken into account within the Nitrogen Predictor software have been considered.

♦ Harvest date

Nitrogen is the nutrient most directly associated with crop yield and therefore using the right amount is important. The aim is to apply enough for the crop to reach full maturity at a suitable harvest date and it is this harvest date which is the first factor that should be taken into account. If the desire is for an early harvest, perhaps to allow time for establishment of a following crop or to minimise the potential soil structure damage associated with a late harvest on unsuitable soil, nitrogen recommendations should be cut by up to 40 units/acre.

Drilling date

The fixed heat unit requirement of, particularly maize hybrids means that drilling date should also be taken into account. Early drilled maize will have plenty of time to reach maturity so full nitrogen recommendations should be OK. Reducing the amounts of nitrogen applied to late drilled crops will go some way to speed up maturity in the autumn.

Soil Type

Heavier, high clay content soils are better at retaining nutrients than lighter soils. Less over winter leaching of nitrogen is likely to take place in heavier soils and as a result the need for additional nitrogen, be it from bag or organic manure, is less than would be the case on light, sandy, soils.

♦ Winter Rainfall

Nitrogen is very soluble in water and as a consequence travels very easily with this water either down through the soil as nitrate leaching or across the surface as runoff. Such easy loss of nitrogen means that nitrogen fertiliser rates may need increasing by up to 20 units/acre where higher than average autumn and winter rainfall pre maize drilling have been an issue.

♦ Soil Structure

Last year's poor weather meant that many crops were harvested in far from ideal conditions, with the result that soil structure may well have been compacted. Such compaction, unless sorted by appropriate sub soiling, will inevitably limit the rooting zone for this year's maize. If you know your fields are compacted and conditions or time will not allow you to take remedial action then extra nitrogen, up to 30 units per acre, may well be justified to supply crop needs from a smaller rooting zone.

Previous cropping

Previous field cropping history will also have an impact. Nitrogen hungry crops and rotations, such as those including cereals will leave little for future crops, in contrast to leguminous crops which will fix and ultimately release crop available nutrient. Use of organic manures in previous years will also have an impact.

Organic manures

Last but not least the type, timing and application rates of any organic manure applied should be considered. Spring applications will mean that the bulk of the available nitrogen can be captured by the crop, whereas a significant portion of the available nitrogen applied in the autumn will be lost via leaching.

While it is of course possible to manually make allowance for all the above when coming up with a farm recommendation, by far the easiest option is to use the Nitrogen Pre-

dictor service input forms which are available via the office or MGA web site. www.maizegrowersassociation.co.uk.

Nitrogen timing

Finally a little on timing of nitrogen application. As with most crops, nitrogen is best applied to maize close to peak crop demand. With maize, this is not always possible due to the risk of nitrogen prills getting stuck between leaf and stalk and causing crop scorch. The recommendation is therefore to apply 60% of crop requirement pre emergence, the with remainder applied at the 2 – 4 leaf stage post emergence to avoid the risk of trapped nitrogen and crop scorch.

