

AGRONOMY TECHNICAL NOTE – MAY 2015 MGA SMALL PLOT RESEARCH 2015 JOHN MORGAN – MGA OFFICE

We are pleased to announce that this year's MGA research programme is finally sorted and commissioned. The aim of this technical note is to set out the work we are undertaking on members behalf and with your subscriptions. Before doing so however I thought it may be of interest to explain the process that has enabled us to get to this point.

The activities of the MGA are overseen by a Council of Management (board of directors for all intents and purposes). This group, made up of livestock and biogas producing farmers, is currently chaired by south west dairy farmer Michael Christensen. At the December Council meeting research proposals are presented by Simon Draper and the MGA office team. The proposals are discussed in detail and at length during and between the December and February council meetings. During the latter of these meetings decisions are made as to the budget available for research and which proposals to take forward. Jean and John in the office then action this list with trials being put out to tender and commercial companies contacted to ask for treatments they would like included. approach, while long winded, has stood the test of time and continues to deliver what we believe is useful and farmer relevant research results.

2015 trials programme

This year, as a consequence of the positive financial position of the association we have commissioned more work than possibly in any of the last ten years. Subjects covered range from agrochemical options, to variety trials with lots in between. All the trials are replicated and results analysed statistically. The trials are truly independent of any outside influence and this year include:

Pre, post and Sequential herbicide trials – These three trials continue the longest running work programme of the association. The aim of the research is to appraise the ongoing performance of existing chemical herbicide options and to identify and test the new kids on the block. The results of the work are presented at the MGA conference and

provide the background for Simon Drapers ongoing advice to members as to what to use where and when.

<u>Herbicide options under plastic film</u> – Growers using plastic film continue to raise difficulties with weed control as their biggest agronomic concern and with this in mind we have commissioned this trial for the first time. The project will look at the established chemical options post plastic breakdown, in order to produce advice for farmers keen to overspray their crops.

<u>Fungicide trials</u> – The threat of Maize Eyespot and other fungal diseases continue to grow and as consequence we will be running another trial focused on the available treatments, timings and efficacy. Site selection is the name of the game for this trial, as we try to locate the project on a farm with real foliar disease issues. Last year we were unlucky and were not able to run the trial.

<u>Maize Eyespot Variety Work</u> – In addition to the fungicide options trial outlined above, the MGA continue to contribute financially to the ongoing variety screening work being undertaken by the National Institute of Agricultural Botany (NIAB) the results of which appeared for the first time in last year's variety lists.

<u>Fertiliser Trials</u> – There will be two MGA fertiliser trials this year. The first focuses on the need for sulphur, with the second revisiting the issues of starter fertiliser. As summarised elsewhere in this mailing there appears to be a clear need for sulphur to optimise maize crop performance. This year's trial aims to refine this fact so that more specific recommendations can be made to members in the future.

<u>Seed rate/row width research</u> – This work aims to build on lessons learnt in the past where we found that more evenly spaced plants yielded more maize per area of land. The aim is to quantify the yield and quality implications to the crop of changing seed rates and row widths. This work is set to have particular value to the biogas growing

members, where overall crop yield continues to be a key driver.

Over sowing maize – The ongoing interest of the MGA in reducing the environmental impact of maize growing in terms of soil erosion/soil wash and nutrient leaching, combined with the lessons learnt from recent study of European work has prompted a trial focused on the impact on crop yield of over sowing maize with perennial rye grass and chicory at two different crop growth stages. The work is the prelude to what we hope will be a significantly larger project in 2016 where we hope to review over sowing of several different crops, with different techniques at different timings.

We hope to report on the progress of the above trials during the season and even at this early stage can confirm that the maize under film variety trial has been drilled by Matt Shine and his team and is no doubt nice and warm and already making progress.

Alongside the MGA's own small plot trial program outlined above we continue to support financially the British Society of Plant Breeders (BSPB) with the independently run variety testing program and for the second year will be working with SMACO to trial varieties suitable for growth under plastic film.

We would ask any member keen to know more about the Research and Development work of the MGA to make contact with the office, where we can send on trial protocol information, or put them in contact with Simon Draper and or myself to talk about previous year's results and the lessons learnt.