A short snapshot of other highlights from 2021

'All shades of yellow'

Operation Emerald was a great success in 2021. Project 'Verde' looked at the impact of Beet mild yellowing virus (BMYV) and Beet yellows virus (BYV) on current RL varieties. Trials were hand inoculated to ensure good infection and separate control blocks were used for comparison. BMYV was found to be less damaging than BYV in most varieties. The experimental plots averaged 119 adjusted tonnes in the absence of virus, 100 tonnes under BMYV and 88 tonnes under BYV. This will be replicated for a further two years to see if the results are consistent across years.

Capturing carbon – our aspirations

We are very aware of the concerns growers have around achieving net zero targets, and what this means in practice on farm. We have been working closely with NFU Sugar and British Sugar to understand how we can obtain more accurate data for UK-grown sugar beet, as many current carbon calculators take data from oversees, which may be not as relevant to UK conditions. Georgina has been exploring how the use of carbon flux towers, placed out in the field monitoring CO_2 emissions, could be the answer to gaining much better data for our sector. We hope to initiate new projects during 2022.

The oldguard out – NEMGuard in

Following work by BBRO, with the manufacturer Ecospray and distributor Certis Europe, the authorisation for NEMguard DE in sugar beet for free living nematode control was approved at the end of 2021. Working with several growers to trial the product at field scale, we were pleasantly surprised by the positive results which showed the product to be an effective replacement for Vydate. The photo shows smaller beet on the left as a result of FLN infection and without the protection of NEMguard.

It's a risky business....

Not getting your fungicide timings correct that is! The cercospora early warning alert was in full swing for the 2021 season. Updated daily, it provides the risk of a cercospora outbreak in your local area by using an established temperature & humidity model, which is used to trigger a high-risk alert. Warm temperatures (>25°C) and high humidity (>90% for more than 10 hours per day) provide ideal conditions for rapid spread of this disease. It is essential that crops are checked very closely for symptoms when at high risk. Applying fungicides at the early onset of cercospora symptoms is key to successful control, but only where symptoms are found. Look out for the cercospora early warning alerts in the BBRO bulletins throughout 2022.

'Digging deep' cutting back on nitrogen rates

In response to the exceptional increase in fertiliser prices, many growers were asking BBRO how this may influence the economic optimum fertiliser rates ahead of drilling sugar beet in 2022. BBRO responded with an opinions piece on our website looking primarily at nitrogen, but also considering phosphate and potassium too. BBRO developed a check list for you on how to avoid using too much nitrogen fertiliser during these challenging times with increasing input costs.