

AFCP Charity Funded PhD Students Share Their Work

Jim Orson, AFCP Board Member and retired agronomist shares some reflections on last week's AFCP Student Forum, hosted by NIAB.

Leonardo da Vinci would have enjoyed attending the biannual AFCP Student Forum. There were 14 presentations by those in the latter part of their agricultural charity funded PhDs. They were all superb. Each had collated and carefully analysed a huge amount of data before presenting simple but scientifically robust conclusions. Da Vinci would have applauded this because his scientific axiom was 'simplicity is the ultimate sophistication'.

There was a similar number of poster displays by those in the first couple of years of agricultural charity funded studies. The authors clearly presented the purpose of their research and the approaches they were adopting.

Adding to the buzz of the day, there was a panel led discussion focusing on job opportunities for PhDs. This must have been particularly useful to those seeking a career outside academia.

Subjects of projects

Common themes emerged, including alternative solutions to veterinary drugs and pesticides, soil health and management, reducing climate change and plant breeding.

There were only two presentations from the livestock sector which were desk-based and/or lab-based studies. This may reflect the charitable funding available for livestock research or the cost of animal experimentation. It was noteworthy that few of the arable based PhDs involved extensive field trials and those who did were piggy backing on existing long-term trials. Lab-based studies produce quicker results and can be far cheaper. Perhaps the potentially higher costs of some livestock and field plant-based PhDs is something that charities need to consider more when discussing their educational objectives.

Universities hosting PhDs

The universities hosting PhDs that attracted agricultural charity funding stretched far beyond the traditional 'agricultural' institutions. This is perhaps not surprising because most universities have botany and zoology departments. Agricultural charities fund PhDs not only to generate new knowledge but also to attract young people interested in research into what is an ever increasingly knowledge-based food production industry. The net needs to be cast as wide as possible.



Personal highlights

It is obvious to all I that am no Leonardo, but I have always been a fan of simplicity. One speaker stated that we need to enhance photosynthesis and also stress tolerance in order to feed the world in the future. Simple but she got it in one! In clarification, she said that enhancing photosynthetic activity goes beyond breeding goals and includes growing healthy and optimised crop canopies in healthy soils.

Long-term cultivation field trials indicate it takes six or seven years for the soils suited to very shallow or direct drilling to adapt fully from deeper tillage. My theory, due to a hint from a researcher on worms, is that it takes this length of time for worm populations to adapt to and provide structure to the newly undisturbed soil layers. Proof of this was provided by a PhD student. It sent a shiver down my spine! Just one of the joys of attending the AFCP Students Forum! The next one is due in 2026.



Picture: Jim Orson

Please click on the below to see the student forum posters:

[Aaron Ainsworth](#)

[Aarushi Kumar](#)

[Adam Peter](#)

[Alexander Miliken](#)

[Bethany O'Sullivan](#)

[Cristina McBride Serrano](#)

[Fergus Newman](#)

[Fern Baker](#)

[Claire Wheeler](#)

[Edwin Toreveyi](#)

[Josie Lynch](#)

[Laura Gimenez-Molina](#)

[Laura Sapeli](#)

[Louisa Moor](#)

[Nupur Tailor](#)

[Patrick McClean](#)

[Piotr Kasznicki](#)

[Theo Welby](#)

[Wing Ng](#)

[Fareed Bhatti](#)

[Elena Bidash](#)

[Anisa Blower](#)

[Ana Prada Barrio](#)

[Abi Brock](#)