



# The best student wheat growers in the country



**T**hey tested their crop management skills against agricultural students from across the UK to win the 2015 NIAB Agronomy Cup and the title 'the best student wheat growers in the country';

## **congratulations to Agric B from Newcastle University.**

George Senior, Joe Campbell, Andrew Hunter and Peter Armstrong Foxton, final year students in BSc Agriculture with Honours in Farm Business Management, achieved the highest gross margin in the competition at £1,540.83/ha, based on a yield of 15.61 t/ha and an input cost of £82.30/ha.

They beat 16 other university and college teams to lift the cup and win a day out with a NIAB TAG agronomist, free entry to a NIAB TAG members technical conference and a £50 book voucher each.

The winners all come from family farming backgrounds; Andrew's are arable farmers in East Lothian, George's family are sheep farmers near Huddersfield, Peter has a Cumbrian upland farming background and Joe's family farms beef and sheep near Durham.

The NIAB Berwick site had to accommodate four competing teams from Newcastle, with three of the teams finishing in the top eight. The site is particularly high yielding with an untreated yield of 13.57 t/ha, but the competition is judged on a number of factors, including margin as well as yield, so the Newcastle students had no advantage.

Across all the competition plots the highest yield was 15.68 t/ha (104.8% of site standard), the lowest yield was 9.44 t/ha (99.2% of site standard), the highest input costs were £121.57/ha and the lowest

| Final results 2015 |  |
|--------------------|--|
| 1                  | Newcastle University - Agric B                     |
| 2                  | Duchy College - Unbelievable, Jeff!                |
| 3                  | Harper Adams University—East, Sleep, Wheat, Repeat |
| 4                  | Newcastle University - Team D                      |
| 5                  | Writtle College                                    |
| 6                  | Easton & Otley College - Cropping Marvellous       |
| 7                  | Newcastle University - Agric C                     |
| 8                  | Easton & Otley College - Team A                    |

Also took part - HAU's Serial Yielders, Moulton College's Teams A, B & C, Newcastle University's Team A, Sparsholt College, Royal Agricultural University's Teams A and B and Duchy College's Team B

| Trials sites/NIAB centre   |
|--|
| Sutton Scotney (Hampshire) - Sparsholt College                   |
| Berwick (Northumberland) - Newcastle University                  |
| Harper Adams (Shropshire) - Harper Adams University              |
| Morley (Norfolk) - Easton & Otley College                        |
| Cambridge (Cambridgeshire) - Moulton College and Writtle College |
| Cirencester (Gloucestershire) - Royal Agricultural University    |
| Newton Abbot (Devon) - Duchy College                             |

## Crop input recommendations

| Treatment | NIAB standard                                   | 1st Place<br>Newcastle University<br>'Agric B' | 2nd Place<br>Duchy College<br>'Unbelievable, Jeff!' | 3rd Place<br>Harper Adams Uni<br>'Eat, Sleep, Wheat, Repeat' |
|-----------|---|--|---|--|
| AN        | As farm crop                                    | As farm crop                                   | As farm crop  | As farm crop   |
| T0        | Cherokee @ 1.0 l/ha                             | Bravo @ 1.5 l/ha                               | Bravo @ 1.0 l/ha<br>Cherokee @ 0.5 l/ha             | Cherokee @ 1.0 l/ha  |
| T1        | Tracker @ 1.0 l/ha<br>chlorothalonil @ 1.0 l/ha | Adexar @ 0.75 l/ha<br>Bravo @ 0.5 l/ha         | Adexar @ 1.0 l/ha                                   | Aviator @ 1.0 l/ha<br>Bravo @ 1.0 l/ha                       |
| T2        | Adexar @ 1.5 l/ha                               | Aviator @ 1.0 l/ha                             | Adexar @ 2.0 l/ha<br>Bravo @ 1.0 l/ha               | Adexar @ 1.25 l/ha<br>Bravo @ 1.0 l/ha                       |
| T3        | Folicur @ 0.75 l/ha                             | Folicur @ 1.0 l/ha                             | Comet @ 1.25 l/ha                                   | Proline @ 0.3 l/ha<br>Folicur @ 0.5 l/ha                     |
| T0 PGR    | CCC @ 1.25 l/ha                                 | CCC @ 1.0 l/ha                                 | CCC @ 1.6 l/ha                                      | CCC @ 1.0 l/ha   |
| T1 PGR    | CCC @ 1.0 l/ha                                  | CCC @ 1.5 l/ha                                 | CCC @ 0.7 l/ha                                      | None   |
| Late N    | None  | None   | None  | None   |

input costs were £71.23/ha.

Team captain Joe Campbell says: "We began with Bravo (ai *chlorothalonil*) at a higher rate to combat septoria and provide protection to the crop. Fortunately we anticipated a dry spring so recommended a lower rate of Adexar (ai *epoxiconazole* + *fluxapyroxad*) at T1, reducing any septoria and rust in the lower leaves and providing systemic protection before T2. We decided to go with the standard rate of *chlormequat* for T0 but a higher rate in T1, as the wheat followed oilseed rape and so a higher supply

of mineralised nitrogen should have been available to the crop."

For the T2 timing the team chose Aviator (ai *bixafen* + *prothioconazole*) to provide additional control of all the major diseases, keeping the rate low again because of the low septoria pressure. Folicur (ai *tebuconazole*) was chosen at T3 to control ear blight and provide moderate control of any septoria or rust left in the crop to protect quality. No additional N was applied as they felt it was an unnecessary cost considering historically very few teams in the competition have achieved milling quality.