FARMEXCELLENCE



Brigg Monitor Farm

Meeting title: Environment - a sign of things to come

Date: 11 December 2019

Speakers: Steve Ellis (ADAS), Barney Parker (Ashfield Farmed Environment Services)

Integrated Pest Management

- New products are much more expensive than existing ones
- Resistance problems (e.g. to pyrethroids) are the result of hugely increased usage
 - IPM consists of a number of different components:
 - Risk assessment using agronomic factors
 - o Thresholds monitoring numbers and activity
 - Cultural control
 - o Chemical control
 - o Biological control
 - $\circ \quad \text{Crop tolerance} \quad$
- Of the different components, each alone is not as effective as an insecticide spray so you need to use them combined
- A further component is "Do nothing," i.e. ask the question "Do we actually need to control this pest?"
- We need to better understand the relationship between pest levels, damage and yield
- To do nothing you need to have 100% confidence in the information available
- How tolerant is the crop to the pest? We need to be able to measure tolerance better and tolerance needs to be used to rationalise insecticide use

Thresholds

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Some thresholds are out-dated and there are too many but those given in the AHDB Encyclopaedia of pests and natural enemies are the best information we have available.

We need to ask the right questions, e.g. how many pods or shoots are needed to avoid a yield reduction?

Take-home messages

- Check thresholds before making decisions to control a pest or disease does the level of infestation warrant control?
- Use a combination of components as part of a control strategy
- Choose tolerant varieties the <u>Variety selection tool</u> can be used to help choose a variety suited to your region and risk factors

Further information

- AHDB Aphid News
- BYDV management tool
- Variety selection tool
- Encyclopaedia of pests and natural enemies
- Encyclopaedia of cereal diseases



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- Encyclopaedia of arable weeds
- FAR focus: Integrated Pest Management (New Zealand)
- Recommended Lists for cereals and oilseeds
- Research projects:
 - <u>21510042</u>: Novel approaches to CSFB (PhD)
 - \circ $\,$ P1907308: Management of aphid and BYDV risks in winter cereals
 - o 21510015: Monitoring and managing insecticide resistance in UK pests
 - 21120049: Integrated pest management of cabbage stem flea beetle in oilseed rape
- Farm Wildlife's 6 key elements to helping wildlife on farm can be found at farmwildlife.info

AHDB resources

- Understand your business costs with AHDB's benchmarking tool Farmbench at ahdb.org.uk/farmbench
- Monitoring tools are available at <u>ahdb.org.uk/tools</u>
- Sign up to market information and research newsletters at ahdb.org.uk/keeping-in-touch
- Find out what's going on at other Monitor Farms and Strategic Farms at ahdb.org.uk/farm-excellence
- All AHDB events can be found at ahdb.org.uk/events
- For guidance on how Brexit will impact your business, see ahdb.org.uk/brexit

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