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Grain zone news

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FURTHER INFORMATION:
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Diary dates More detailed diary dates are located on the GRDC website.

January 07	
15	Adjuvant Technologies for Spray Applications workshop , University of Qld, Customs House, Brisbane Contact: Andrew Hewitt, 0427 025 354, 07 5460 1293, a.hewitt@uq.edu.au
17	Spray Drift & Application Modelling Workshop , University of Qld, Customs House, Brisbane Contact: Andrew Hewitt, 0427 025 354, 07 5460 1293, a.hewitt@uq.edu.au
19	Aerial Application Workshop , University of Qld, Gatton Campus Contact: Andrew Hewitt, 0427 025 354, 07 5460 1293, a.hewitt@uq.edu.au
February 07	
13-14	Grains Research Update for Advisers (Southern Region) , Wagga Wagga, NSW Contact: Jon Lamb, 08 8362 5417, jlcom@chariot.net.au
13	Central West Conservation Farming Association/ Stipa Native Grasses Association 2007 Conservation Agriculture Conference , Wellington, NSW Contact: Neville Gould, 02 6845 1044, cwca@bigpond.com.au
14	Central West Conservation Farming Association/ Stipa Native Grasses Association 2007 Conservation Agriculture Field Day , Wellington, NSW Contact: Neville Gould, 02 6845 1044, cwca@bigpond.com.au
19	Nyngan Grains Research Update , Nyngan RSL, NSW Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
20	Coolah Grains Research Update , Coolah Sporting Club, NSW Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
21-22	Dubbo Grains Research Update , Dubbo RSL, NSW Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
23	CWFS Farm Machinery Field Day , Condobolin Ag Station, NSW Contact: Debbie, 02 6895 1001, debbie.o'neill@dpi.nsw.gov.au
28 Feb - 1 Mar	Goondiwindi Grains Research Update , Goondiwindi Community Centre, Qld Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
March 07	
6-7	ABARE Outlook 2007 Conference Contact: Yvonne Kingsley, Ph: 02 6272 2265, Email: ykingsley@abare.gov.au
27-28	The 14th Australian Soybean Industry Conference "Success with Soybean" , Bundaberg, Qld Contact: Andrew Dougall, 07 4132 5539, andrew.dougall@dpi.qld.gov.au Further information: http://www.australianoilseeds.com/soybeans/australian_soybean_conference_2007

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GRAINZONE www.grdc.com.au

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Green Vegetable Bug Adult Equivalent (GVBAEQ) – a new way to determine sucking pest thresholds

Like Dry Sheep Equivalent (DSE) calculations for stocking rates, a new threshold calculator is being developed by QDPI & F to calculate the Green Vegetable Bug Adult Equivalent for determining spray thresholds for sucking pests in pulse crops.

“The issue is that there are different growth stages of a number of different podsucking bugs and it is the cumulative damage that knocks you for six, so we need a combined rating system to account for them all” said Mr Hugh Brier from QDPI & F, Kingaroy.

“A complicating factor is nymphs. While a first instar nymph doesn't cause damage, it has future potential for damage that needs to be accounted for. Similarly later instar nymphs cause less damage than adults, but it is the cumulative damage they cause until they reach adulthood, and beyond (if the crop hasn't reached harvest) that needs to be considered. The level of damage potential depends on timing - the closer you are to harvest (and the crop being safe) the less damaging podsucking bugs will be, as early instar nymphs will not have time to reach a really damaging size, and late instars and adults will have less time to inflict damage,” said Mr Brier.

In a new rating system, each species has been given a Green Vegetable Bug Adult Equivalent (GVBAEQ) rating. For example; brown bean bugs are considered equal to a green veggie bug, while red banded shield bugs are equivalent to 3/4 of a veggie bug, brown stink bugs are equivalent to 1/5 of a green veggie bug and so on.

Nymphs of each species are also given an adult GVBAEQ based on the time of scouting (days until

the crop is safe at harvest), and expected mortality of nymphs.

The rating system is being developed as an Excel spreadsheet. Data entered includes the number of days until harvest, how many nymphs in each instar and how many adults for each species, row spacing and estimate of number of seeds per square metre. From this data the spreadsheet calculates GVB adult equivalents and thresholds based on the time of scouting. From this it is easy to determine whether a spray threshold has been reached or not.

“The rating system assumes that you are scouting regularly and do not have large numbers of bugs there for weeks” said Mr Brier. “Thresholds are based on quality and are fairly low. For edible (human consumption) pulses, receival thresholds often only tolerate 2% damage so if insects have been there for weeks, this rating system and the associated thresholds will not apply as the critical level of damage may have already been reached or exceeded.”

“Bugs are notoriously variable across a paddock and people must be careful to sample with high enough frequency. A rough guide is for every 10 ha sample 5 sites with 5 x 1m beat sheets per site, twice weekly during podding” said Mr Brier.

FURTHER INFORMATION:
If you are interesting in trialling this spreadsheet on your blackberry/palm pilot, contact Hugh Brier, 07 4160 0740, Hugh.Brier@dpi.qld.gov.au

Project code: DAQ000086

