

# Welcome to aabnews Issue 78...

## Contents

### Conference Reports

Dust Emissions  
from Seed Drills  
p. 3

Crop Resource Use Efficiency  
& Field Phenotyping  
p. 4

Environmental  
Management on Farmland  
p. 5

### Feature

Bees and the EU  
Neonicotinoid  
Pesticide Ban  
pp. 6-7

New Members Elected  
pp. 7-8

### Job Advert

AAB Honorary Treasurer  
p. 9

Book of the Month Sale  
p. 10

AAB Officers of Council  
p. 11

AAB Conference Calendar  
p. 12

If you have any **ideas** for conference topics and/or would like to get more involved in developing the scientific programme for a meeting then please get in touch via your group or:



Email: [gensec@aab.org.uk](mailto:gensec@aab.org.uk)



Group committees are now developing the proposals for the conference programme for 2014..

## News from Council

Council met on

### 20th March 2013 at the AAB Office at Wellesbourne

The March Council is the first Trustees' meeting of the year and this year it was also the first meeting for a number of new Trustees. At the beginning of his term as President, Peter Shewry welcomed Bill Davies as Vice-President and Finlay Dale as the new convener of the Plant Physiology and Crop Improvement Group to their first Council meeting. Council also welcomed the interest of members associated with the Cropping and the Environment Group in taking on the role of convener of that group and looked forward to welcoming a new convener to its meeting in June. Council approved applications for membership from 38 new applicants and noted the breadth of interest amongst applications for membership.

We look forward to working with these new members in the months and years to come. Council thanked all the conference organisers who had help deliver an excellent conference programme in 2012. The commitment of conference organisers is essential to the success of all our conferences. We have a broad programme in place for 2013. Council received reports on publications. Annual accounts for 2012 were confirmed by Wiley-Blackwell with both *Annals of Applied Biology* and the *Plant Biotechnology Journal* providing surpluses in 2012. Both these journals have now signed up to new 'green' open-access policies in line with all those in place for all the Wiley-Blackwell journals. The AAB continues to invest in the development of the new fully open access journal - *Food and Energy Security*. After the annual process of staff review, Council were pleased to be able to award small bonuses to all staff to recognise their hard work and effective delivery of the AAB objectives over the year.

- Elizabeth Stockdale

*Celebrating 100 years of*

**Annals of Applied Biology**  
An international journal of the **AAB**



**INFORMATION & EVENTS SOON**

## Dust Emissions from Seed Drills

Julius-Kühn Institut (JKI) Berlin-Dahlem, Germany, 14-15 March 2013

The timing of the recent Pesticide application group workshop concerning Dust Emissions from Seed drills could not have been more opportune given the current debate, restrictions and suspension of the use of neonicotinoids.

What was originally proposed as a one day workshop bloomed into a 2 day mini conference attracting 20 abstracts (16 platform and 4 posters) from Germany, Italy, Belgium and the United Kingdom; the Association is indebted to Dr Andreas Herbst and Hans-Joachim Wehmann of JKI for all their hard work organising and subsequent smooth running of the workshop.



Dr Andreas Herbst, JKI

Concern about the problem of seed treatment dusts emitted during the drilling operation and the effect on bee health had been high for some years in Germany; hence the group's first venture to organise a workshop at the Julius Kühn Institute in Berlin that was attended by 38 delegates representing regulatory authorities, agrochemical manufacturers, biological control industries, academic and research institutions and seed treatment companies. Following a welcome to JKI and review of its history by Dr Gerhard Gundermann, the workshop commenced with a question by Dr Udo Heimback of JKI - 'Where are we now?' reviewing the subject

from a physical, chemical and ecological point of view, reviewed the field experiments carried out since 2008 when 12000 hives in Germany reported bee poisonings and the historic variability in quality of treated seed from different sources within Europe.



Invited Speaker: Dr Udo Heimback JKI

The event attracted papers concerning the effect on bee colonies in fields sown with treated and untreated seed using different seeding equipment and the dust deposition values for such machinery. Considerable discussion centred on the collection efficiency of the bee that has evolved to be one of nature's optimised dust collectors. Although the workshop was not concerned exclusively with the use of neonicotinoids much of the subject matter debated was done so with those chemicals in mind. Presentations representing several members of the agrochemical industry, often reporting on collaborative works, spoke of their attempts to mitigate the emissions as a response to the imposed or impending restrictions on use. These included attempts to quantify the emissions and the affect of modifications to machinery made by manufacturers to meet local legislative requirements, as well as developing more efficient dust catchment devices. The latter was also the subject of papers by academic and research organisations. A strong

interest in the characterisation of the abraded particles and the modelling of dust plumes was the subject of Belgian and UK research using CFD techniques, while Italian research attempted to set a bench mark for testing and evaluation of commercial seeding systems. Machine testing techniques and methodologies used in Germany and Italy were another area debated relating to both outdoor, in-field testing and indoor, under artificial air flow conditions. It was disappointing not to attract any representation from the seeding machinery manufacturers to discuss modifications to machine design, a mantle picked up again by the chemical



Prof. Paolo Balsari, Uni. Of Turin

manufactures and academia. The circle was more or less completed with the final presentation returning to the subject of quality control of the product and optimisation of the seed treatment process at ESTA - certified seed treatment sites. Such was the discussion throughout the workshop that there was a call to produce a mini-aspects of the event and a more complete record than the abstracts alone. However upon reflection it was considered impractical to produce at this stage but instead a section and session will be devoted to the subject in the IAPA 2014 conference proceedings.

- Simon Cooper