

AUSTRALIAN GRAIN STORAGE & PROTECTION CONFERENCE

23-24 JUNE 2016
RYDGES
186 EXHIBITION STREET
MELBOURNE

Meeting Market Requirements

BROUGHT TO YOU BY THE NATIONAL WORKING PARTY ON GRAIN PROTECTION (NWPGP)



2016 AUSTRALIAN GRAIN STORAGE & PROTECTION CONFERENCE OUTCOMES

This File Note lists outcomes agreed by the 2016 Australian Grain Storage & Protection Conference, hosted by the National Working Party on Grain Protection (NWPGP) in Melbourne on 23-24 June 2016. Agreed outcomes, major discussion points and findings are listed numerically in no order of priority.

There were 118 attendees at the meeting, representing all sectors of the grain supply chain.

To provide comment on this document or to comment on any NWPGP related matter, please contact GTA via email at admin@graintrade.org.au.

A. Official Welcome

The Chairman of Grain Trade Australia (GTA) Peter Reading opened the meeting. GTA provided a commitment to continue to support the activities of the NWPGP, including:

- Administration of the NWPGP and organising the annual meeting which continues to be strongly supported by industry and government; and
- Promotion of the NWPGP and its deliberations through various industry publications and on the GTA website.

The Chairman commented on the spread of participants from all areas of the supply chain, including international delegates, noting it was critical that all participants work together to ensure Australian grain maintains its quality reputation and integrity. He also emphasised the importance of technical aspects to trade and market access.

B. Continued Role of the National Working Party on Grain Protection

The meeting acknowledged the assistance of GTA and it was agreed to continue the NWPGP annual meetings using the administrative support offered by GTA.

A number of administrative tasks were discussed and **agreed**:

- 1) That the 2016 meeting outcomes be documented and distributed to all attendees for comment.
- 2) That the outcomes of the 2016 meeting be placed on the GTA website and forwarded by GTA to all invitees, attendees and the wider industry via a GTA Member Update. See <http://www.graintrade.org.au/nwpgp>.
- 3) The SWG is to develop the agenda and make arrangements for the 2017 NWPGP annual meeting, to be held in Melbourne.
- 4) A note of thanks was provided to:
 - i. GTA staff for their continued assistance in administering the NWPGP; and
 - ii. All sponsors of the 2016 NWPGP meeting.

It was further **agreed**:

- 5) That the SWG continues to operate and provide oversight of NWPGP activities.
- 6) That the SWG liaise with the GRDC (and other industry parties as required) on any matter relating to activities discussed under the auspices of the NWPGP.

C. Communication & Extension Activities

The meeting was provided with details of a range of communication and extension activities conducted and supported by various industry organisations such as the Grains Research and Development Corporation (GRDC) and the Plant Biosecurity CRC:

- The GRDC continues to fund extension staff in a range of activities covering grain storage, chemical use and grain hygiene. Extension material is developed on various topics and widely distributed as required.
- Options for addressing the needs of industry beyond the 2018 deadline for the term of the Plant Biosecurity CRC are being developed and industry needs to agree on the best model going forward.

It was **agreed**:

- 7) That the research requirements as noted during the meeting be documented and forwarded to relevant organisations (e.g., Plant Biosecurity CRC, GRDC) for consideration.
- 8) That individual organisations are encouraged to make submissions to heads of departments, ministers etc. regarding the need for on-going biosecurity research.

D. Regulatory Update

The meeting was provided with an update on a range of matters dealing with Codex and other international and domestic regulations:

- The significant input in Codex matters from Government and the benefits of that input to industry was acknowledged.
- Several key Australian export markets are in the process of reviewing their MRLs.
- Australia continues to provide input into overseas country regulatory issues through the Government to Government mechanism. A key participant in providing the Australian position in those reviews is the National Residue Survey (NRS), supported by the Australian Pesticides and Veterinary Medicines Authority (APVMA).
- Co-ordinated industry input via the NWPGP into developing the Australian Government position continues to be vital.

- Codex update of crop grouping for cereals, oilseeds and pulses. The APVMA progress in this area was also outlined.
- The progress of FSANZ development of a low level MRL policy to account for inadvertent residues of pesticides in foods.
- Progress of the capacity building project lead by FSANZ to promote harmonisation of MRLs for pesticides in the Asia-Pacific region.
- A new Global IESTI process would effectively reduce several MRL's, for example, Fenitrothion could be reduced 7-fold.
- Details of the current APVMA chemical re-prioritisation review were outlined, including the benefits for industry to place a submission by the required deadline. A submission will be developed following feedback from the existing NWPGP industry contact list.
- China is planning to harmonise MRLs with Codex by 2020.
- Information on insect control at export was provided. The process of inspection and compliance was outlined as mandated under the Act: Export Control (Plants and Plant Products) Order 2011. In general Australia has a good reputation for supplying insect-free grain, however, some non-compliance was noted. In addition, some exporters were not competent with paperwork.

It was **agreed**:

- 9) That the meeting fully endorses support for Australia to be represented on the IESTI working group, specifically APVMA.
- 10) That the meeting fully endorses the continuation of the GRDC funded project enabling the NWPGP Chairman on behalf of the Australian grains industry:
 - i. To provide input to and attend as required, international forums such as Codex; and
 - ii. To actively liaise with national regulatory organisations such as the APVMA and NRS on chemical related matters.
- 11) That through the GRDC funded project, the NWPGP Chairman will:
 - i. Continue to liaise with industry to provide input to the NRS on matters relating to chemicals raised through SPS and other international processes; and
 - ii. Continue working with NRS to facilitate the establishment and or maintenance of overseas MRLs as requested by industry.

E. Insect Infestation Trends, Resistance & Grain Treatments

Insect species detected:

- Insect pressure was relatively high this year in eastern Australia.
- No significant differences have been experienced in the insect species detected this year from last year.
- Due to relatively long, hot autumn insects have been found in storage later in this season than in previous years. Moist weather periods also increased numbers, and species associated with moist conditions were more prevalent than usual.
- Research continues on control mechanisms for various quarantinable insects.
- The movement of Grain Beetles between States has implications for movement of resistance genes. Industry was advised it needs to take a broad view when dealing with resistance and insect control (i.e., co-ordinate insect control measures in a geographic region, rather than on an individual site basis).

Stored grain treatments applied:

- No significant departures from prior year treatments have occurred or been required.
- Research continues on small scale use of Nitrogen, especially the benefits for use on-farm where there are appropriately sealed storages.
- The use of Diatomaceous earth as a structural application has been promoted.
- Fumigant and grain protectant treatments continue to be rotated for phosphine resistance management as per the Phosphine Resistance Management Strategy.

An update on the distribution and frequency of insect resistance in Australia was provided:

- There is no significant change in the frequency of weak resistance to phosphine.
- There continues to be a need to pursue resistance testing to the currently available grain protectants.
- The current funding for resistance testing ends 31 October 2016.

It was **agreed**:

- 12) For the Working Group to continue its efforts to update the Phosphine Resistance Management Strategy, and to consider the impact on grain protectant use.

F. Storage Update

The meeting was advised that:

- There is an increasing focus on the use of aeration on-farm given its benefits for managing grain quality and assisting insect control.
- On-farm storage continues to increase.

G. Meeting Market Requirements

A range of topics were covered under this item. These included:

- The in-crop use of Glyphosate for crop topping (particularly in barley) has widespread regulatory/MRL/market access implications.

National Residue Survey (NRS) Results:

- An outline of the testing program and results from the last year was provided.
- Compliance with MRLs remains at a very high level, as per recent seasons.
- Violations of pre-harvest chemicals remain a concern and further work is required on developing appropriate disinfestation and cleaning procedures.
- Where issues have arisen (e.g., Australian MRLs exceeded), trace-back has occurred to determine causes.
- An update on a number of reviews was provided:
 - South Korea – Positive List System is underway as a 2 Stage process. The Government (MFDS) has made several changes to the PLS in recent months.
 - Taiwan – A review of wheat and oats MRLs is currently being conducted.
 - India, China and Indonesia (Country recognition of Australia's food safety systems discussions are ongoing).

It was **agreed**:

- 13) That the meeting fully endorses the NRS Grains program.

- 14) That the meeting fully endorses the establishment of a working group to further develop a Protocol to address in-crop chemical use, using Glyphosate for crop topping use as an initial topic.
- 15) That discussion occurs with the NRS on the formation of a working group to provide industry views on NRS interactions with State Control of Use regulators.
- 16) That the meeting fully supports:
 - i. The activities of the NRS relating to pesticide residues, MRLs, and relevant market requirements, including those raised through WTO SPS and other international processes.
 - ii. The current NRS responsibility of providing market access advice and action to facilitate the establishment of overseas MRLs as requested by industry.
- 17) To continue to support the requirement for industry to outturn grain containing protectants at half the MRL for all existing grain protectants (ROL – recommended outturn limit).
- 18) The Post-Harvest Chemical Usage Recommendations and Outturn Tolerances document for 2015/16:
 - i. Be revised as per the outcomes of the 2016 NWPGP meeting via liaison with the NRS and GPA; and
 - ii. Is placed on the GTA website and distributed to industry.

Results of the 2016 Market Trends Survey:

- More industry participation in the survey would be appreciated.
- Meeting market requirements continues to be a challenge, however overall, Australian grain is highly regarded internationally.
- There continues to be a need to educate industry and increase awareness of market requirements and consequences of the mis-use of chemicals.

It was **agreed**:

- 19) That the feedback from the survey in terms of chemical MRL issues is to be included in the various Australian and overseas country reviews as required, including the Market GAP list.
- 20) That further refinement to the Market Trends Survey questions would be of benefit to the NWPGP, including a review of industry issues over recent years.
- 21) That the SWG liaise with GTA (who developed and administered the survey):
 - i. To further refine the survey for 2017.
 - ii. To seek mechanisms for greater industry participation in the survey.
- 22) That a vote of thanks is to be provided to Sheryl Brown of GTA for co-ordination of this Market Trends Survey task in 2016.

The Malting and Brewing Industry Barley Technical Committee (MBIBTC) provided an update on its activities:

- An explanation of the process of evaluation of chemicals to determine their impact on the brewing process and malt production.
- It was reiterated that while approved, the industry does not support the practice of “crop topping”.
- The revised relationship between the MBIBTC and SWG of the NWGP as recently completed was outlined.

H. Specific Chemical Issues

Bromide Ion (i.e., methyl bromide)

- Australia continues to liaise with all relevant chemical manufacturers and international parties seeking support and ultimately the generation of the necessary data at Codex for this compound to continue to be used, given its listing for periodic review in 2019.

Chlorpyrifos-methyl

- Remains due for review by JMPR in 2019.
- In the interim, the existing Codex MRLs (CXLs) remain in place.

Natural and synthetic silica products including diatomaceous Earth

- These products are an increasingly important tool in the control of insects.
- Research continues with synthetic silica. Previous negative characteristics such as changes to test weight and handling characteristics are being resolved due to a possible reduction in application rates and new application technology.
- A registration process is underway to undertake field validation trials of the above.

Nitrogen

- Research continues on the various types of nitrogen generators and the efficacy against various insect species at different temperatures.
- A challenge remains to maintain the half-life in silos where this could be used.

Phosphine

- Phosphine is listed for periodic re-evaluation at Codex in 2020.
- An update on research aimed at supporting modernisation of the aluminium phosphide label was provided. This work is supported by the Working Group and the Plant Biosecurity CRC.

It was **agreed**:

- 23) That industry should be encouraged to provide to the Working Group for compilation into the existing database:
- i. Any issues regarding phosphine use and suggestions for changes to those practices; and
 - ii. Suggestions for potential changes to labels to create clarity etc.

Spinosad

- Is showing good insect control in BHC and on-farm storages.

Sulfuryl Fluoride

- Continues to be used extensively in industry as a “resistance breaker”.
- Various research efforts are underway to evaluate its use to control the strongly resistant Rusty Grain Beetle, one option being its use in combination with phosphine.

I. Research Highlights

The meeting was provided with a summary and updates of progress in the following:

- An outline of research on the management of resistance to phosphine in the rusty grain beetle and other species.
- An analysis of resistance monitoring data.
- Best practice application of phosphine fumigant to large farm storages and implications for the current label.
- Progress in development of a new artificial silica as a grain protectant and fabric treatment.
- Ecology of rusty grain beetle including seasonal and daily flight activity, distance covered, and gene flow on a large scale.
- Initial experiments with use of fumigant mixtures and synergists.
- Development of fumigation protocols for insect control in grain with sulfuryl fluoride and phosphine. These are very close to completion with field trials planned for 2016.
- The benefits of electronically commutated motors for aeration cooling.
- The effect of sulfuryl fluoride on germination.
- Installation of nitrogen generation equipment for grain protection.