The Insect Free Post

Newsletter of the CORESTA Sub-Group on Pest and Sanitation Management in Stored Tobacco Issue 1 – March 2009



Sub-Group objectives:

To share information on methods to control pests in stored tobacco.

To conduct collaborative studies on pest control and sanitation practices for tobacco in storage.

To investigate new technologies and issues related to infestation control methods.

LET US INTRODUCE OURSELVES

Welcome to the first newsletter of the CORESTA Sub-Group on Pest and Sanitation Management in Stored Tobacco (a subgroup of the CORESTA Phytopathology Study Group).

Our co-chairpersons are Vernon Schmidt (RJRT) and Annette Murray (Imperial Tobacco), and our secretary and treasurer are Jane Perry (BAT) and Gary Foote (Alliance One International). The Sub-Group currently comprises 17 members from 13 companies including tobacco processors, leaf companies, fumigation services and the Food and Environment Research Agency (FERA), formerly Central Science Laboratory, in UK.

We meet approximately once per year to discuss the world-wide pest control issues facing the tobacco industry and come up with solutions. We combine the meeting of the subgroup with an ICC - Infestation Control Conference (a workshop open to all parties associated with the tobacco industry). Our goal is to provide the tobacco industry with the knowledge and resources needed to implement the best practices for controlling the two primary tobacco pests, the cigarette beetle and the tobacco moth.

MEETING REPORT

The last ICC was held in Porto Alegre, Brazil on 9-10 February 2009. More than 80 delegates from throughout South America attended.

The Sub-Group met for 3 days following the ICC. The topics on the agenda included: training material updates, budget, Sub-Group organisation, communication and publication of reports, new chemical and non-chemical control tools, pheromone trap options, research reports from FERA, phosphine fumigation developments and issues, and potential alternatives to phosphine. Guest speakers from companies supplying pheromone traps presented on the Borgwaldt Contrap, Fuji Flavor Serrico trap, and Agrisense Mo-Be trap.

Two topics occupied much of the discussions. The first was using controlled atmospheres (reducing oxygen levels to below 1%) to control insects. A task force was set up to investigate this technique. The second was addressing the question of how to improve fumigation practices around the world. A JTI initiative (Infestation Risk Management Partnership) that was

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developed in Malawi was presented and evaluated as a model for doing this.

The next meeting (including an ICC) has been proposed for April 2010 in Kunming, China, hosted by Universal Leaf.

HEADLINES

Monitoring Traps

The Sub-Group is investigating how/if criteria can be established for evaluating whether or not a pheromone trap is acceptable for use within the tobacco industry.

Phosphine Resistance

Beetle resistance to phosphine treatments has been reported since 1985 and is now on the increase. The CORESTA Sub-Group has developed a standard for treating resistant strains but this is not always effective because of poor fumigation practices or local limitations. Also this so called "stronger" standard is very difficult to obtain. There is a concern that fumigators wanting to err on the side of caution are applying excessive fumigant to leaking containers without a full understanding of the impact this may have on the further development of phosphine resistance and on tobacco chemistry. The subgroup is working diligently to provide solutions to these problems (e.g. education

and training, and investigating alternative treatments and methods).

Alternatives to Phosphine Fumigation

For many years the Sub-Group has investigated several alternative chemicals without success but research on the biology and behaviour of the cigarette beetle and tobacco moth have led to one already proven alternative treatment and one potential treatment.

The Sub-Group has established freezing standards (temperature and time) for controlling all life stages of the cigarette beetle.

The team is working with two suppliers of controlled atmosphere (CA) technology to investigate if and under what conditions tobacco pests can be controlled. Over the next few months field trials are planned in Europe and Africa which will broaden our knowledge base with the objective of setting robust, CORESTA standards.

The vision of the Sub-Group is that freezing and CA, already used in the food industry, will ease our dependence on phosphine fumigation. However, moving to freezing and CA will have financial implications, yet to be assessed, and will require suitable facilities for these techniques (shipping containers and tarpaulins will not be appropriate).