Standards

Convener: F. Fleurat-Lessard

The object of the workshop was to discuss setting up certain minimum standards for key research topics, so that these could be used to allow a wider and more useful interpretation to be placed on experimental results. The approach used was to ask moderators to introduce topics on which they were accepted experts, and to present a list of items appropriate to standardisation. These were then discussed by the meeting and a general consensus reached on their suitability for standardisation. Whenever possible, key people were asked to draw up draft standards or general guidelines for circulation and further discussion.

Topic 1: Rapid assessment and testing methods (Dr Ch. Reichmuth)

Draft standards proposed:
- Rapid assessment of phosphine resistance based on knockdown
- Residual test for resistance in beetles
- Treated grain bioassay to demonstrate degree of resistance
- Special procedures of bioassay for new formulations or new types of insecticides (ex.: IGR or inert dusts)

Topic 2: Airtight storage and related techniques (Dr H.J. Banks)

Draft standards:
- Method of pressure testing
- Method of measuring sorption of gasses by commodities

Topic 3: Standardised conditions for measuring population dynamics (Dr N.D.G. White)

Discussion on this topic indicated that it was very difficult to standardise field trials. However, a list of minimum requirements was drawn up covering some aspects of experimental design.

Draft standards or lists of requirements were proposed for:
- Laboratory experiments on population dynamics
- Experiments using trapping

Topic 4: Design of experiments using aeration (Dr D. Armitage)

It was agreed that airflows through grain should be expressed in m³/t/hour. It was also agreed that the ISO method should be used to calculate airflows. However, the meeting note the lack of a standard method of measuring low rates of airflow through grain.

Resolution

The ICC working and study group on storage will do further work from the list of items defined during the workshop, especially on approved draft standards. Several of them should be discussed in the next international meeting concerning storage and stored-products protection (e.g. the next CAF Conference in 1996).