Value Assessments at PMRA

Presentation to the

Pest Management Advisory Council

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Presentation:

1. Objectives
2. Scope
3. Benefits
4. Issues
5. Input from Council

Objectives

- Further long term protection of human health and the environment
- Sustainable pest management
- Provide a baseline for risk assessments and risk management decision-making

Scope of Value Assessments: New Pesticides

- Assess contribution to pest management by examining:
- Proposed conditions of use
- Other information regarding sector, use sites, pest management practices, alternatives, etc.
- efficacy/biology data (consistent with most OECD countries) – it establishes the fundamental conditions of use

Scope of Value Assessments: New Pesticides

- Conducted for all new pesticides, including those for controlling nuisance pests and those of major public health or economic significance

"Agricultural" Pesticides

- Herbicides
- Fungicides
- Insecticides
- Plant growth regulators
- Pheromones and microbials
- Predator control products

"Urban" Use Pesticides

- Personal insect repellents
- Rat poisons
- Home and garden pesticides
- Bear repellents
- Flea collars
- Large scale mosquito control programs

"Industrial" Pesticides

- Wood preservatives
- Cooling tower slimicides
- Sanitizers
- Pulp and paper biocides
- Material preservatives

Scope of Value Assessments

- For New Pesticides:
- Includes an assessment of efficacy but it is not just whether a product works or not i.e.
- Application rates – are they reasonable? Could they be lower without compromising performance?
- Number of applications – how many are needed?
- Are there resistance management recommendations?
- Use instructions – clear? appropriate?
- Application methods – spot or broadcast?

Scope Of Value Assessments (cont'd)

- Does it fit into an IPM program?
- What are the user's expectations regarding performance?
- What level of performance is needed?
- How long will it protect/control?
- Does it contribute to pest management?
- Use claims – supported or deceptive?
- Is it safe for the crop/host?

Benefits of a Pre-market Value Assessment

- Reduced risk to workers, bystanders, and the environment
- Sustainable pest management
- Risk mitigation options
- Leaves room in the ‘risk cup’ for minor uses
- Appropriate use of pesticides

Scope of Value Assessments: Re-evaluation of Older Pesticides

- Scope most often risk-driven
- Accurate assessment of use pattern
- Availability and viability of alternatives
- Sustainability
- Level of detail (e.g. economic impacts) case-by-case

Examples of Value Assessments for Older Pesticides

- Heavy duty wood preservatives
- Organotin antifouling paints
- Transition strategies for organophosphates
- Turf Herbicides (including 2,4-D)

Benefits

- Informed decision-making
- Risk mitigation options
- Risk management options
- Implications of phase-out proposals.
- Support longterm risk reduction and transition strategies

Case Studies

- Addition of claims of controlling cockroaches outdoors e.g., fence posts, tree holes, patios; control of imported fire ants; crops that do not exist in Canada
- Brightly-coloured, insect repellent-impregnated, cloth bracelets for children (and strollers)

Case Studies (cont'd)

- Insecticide-impregnated bed sheets to control dust mites – for asthma control
- Tank mixing two fungicides, which individually give 90% control, to get 94% control (i.e., doubling the amount of products to get marginal (?) additional benefit

Case Studies (Cont'd)

- Prophylactic treatments in general
- Mosquito traps with no effect on population levels and no apparent reduction of nuisance levels

Potential Issues

- Value assessments largely consider the contribution of individual products to pest management and do not address the larger question of pesticide use e.g. cosmetic uses.
- For agricultural minor uses, which by definition are not of economic interest to manufacturers, the costs of generating needed data is borne by users i.e. growers with/without the potential support of provinces, or more recently, AAFC - unless the manufacturer has already generated this data for another country.

Potential Issues

- 'Efficacy' and biology data is not required to be submitted in support of registrations in the United States except for public health pesticides (U.S. law does however require it to be generated). It is required to be submitted in most other OECD countries.
- Low risk products have value assessments tailored to their particular use, however manufacturers of these products sometimes find it difficult to provide data or information that supports even modest label claims i.e. that the product works and has some value.