CropLife CANADA

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Peter Goodhand
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June 14, 2012

Dear Mr. Goodhand,

Thank you for your letter detailing the reasons for the Canadian Cancer Society's position on urban pesticide use.

In reviewing the items cited, it is notable that epidemiology studies form the basis for the majority of the society's concerns. As most epidemiologists acknowledge, epidemiology studies can be helpful for public health assessments and may reveal a previously undetected statistical association, however they can be very difficult to interpret accurately (for examples, see references 1-4).

As a result, it is essential that sound epidemiologic principles are followed when reviewing any epidemiologic study in order to ensure the interpretation is robust, scientifically valid, and ultimately health-protective (4,5). In reviewing the existing data from the Agricultural Health Study — a strong prospective epidemiology study designed to mitigate some of the shortcomings of other studies — scientists have identified a number of limitations and determined that, at this time, the results are insufficient to justify regulatory action (for example, see 6-8). Nonetheless, the preliminary findings are being used to determine what additional studies may be needed (9).

As you know, the Pest Management Regulatory Agency (PMRA) must evaluate and approve all pesticides before they can be sold in Canada. Regulators have an obligation to ensure that their decisions are founded on the best available scientific information, which necessitates a careful review of all available data and consideration of the strengths and weaknesses of each source. In addition, all registered products are periodically re-evaluated based on current evidence and in light of current scientific understanding (10). At both the initial and the re-evaluation stages, PMRA includes epidemiological studies, within a weight-of-evidence approach (11).

Your letter also mentioned the World Health Organization's International Agency for Research on Cancer (IARC) categorization of cancer hazard to humans from various agents. IARC defines a cancer hazard as, "an agent that is capable of causing cancer under some circumstances (12)."

Thus, while IARC may list a chemical as being possibly carcinogenic to humans, this classification is intended to be considered along with the circumstance of use or exposure. This is important because the fact that a chemical may cause a tumorigenic response in a laboratory setting does not mean it will in the course of regular use. For example, benzoyl peroxide is used as a tumour promoter in animal studies of cancer and yet is readily available as a non-prescription acne treatment.

Furthermore, in 2007 IARC stated "very few currently available pesticides are established experimental carcinogens, and none is an established human carcinogen. Studies in humans have failed to provide convincing evidence of an increased risk, even in heavily exposed groups" (13).

The authors go on to conclude that "given the lack of evidence linking pesticide exposure to human cancer risk, no cases of cancer can be attributed to either occupational or non-occupational exposure to this group of agents" (13).

We maintain, as does the American Cancer Society (ACS), that pest control products contribute significantly to the betterment of society. Furthermore, the ACS self-identifies its intersection with the plant science industry as being two-fold: firstly to help increase accessibility to fruits and vegetables and, secondly, to work together to find even better ways of achieving the first goal.

We continue to be interested in meeting with you to further discuss if there are aspects of your concerns that we can address. I assure you that our industry is committed to the responsible use of our products – by farmers and non-farmers alike – and that we take very seriously our responsibility to produce safe tools for pest control.

Sincerely,

Dr. Lorne Hepworth
President

References:

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