

## HERBICIDES AND THE PUBLIC

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Summary. Observations of the public's attitude to the use of herbicides in New Zealand are described. The importance of the type of questions posed by various sections of the public on health and environmental effects of herbicide use with suggestions on the alternative means of communicating scientific facts are discussed.

## INTRODUCTION

The papers presented at this conference and other similar ones around the world provide data which either directly or indirectly lead to an improved understanding and the more efficient control of unwanted plant life. This may relate to food production or amenity services. The information presented in these proceedings is the result of years of effort, however if the scientist, extension worker and marketer of herbicides does not place more emphasis on explaining the value of herbicides to the public much of this effort will be wasted as products are banned on political grounds. Hardly a week goes by without herbicides being mentioned in the popular press, and practically all relate to alleged health or environmental problems. It is not surprising that John Citizen in his urban dwelling believes his environment is awash with highly toxic chemicals ready to destroy himself and his family. The aim of all people using herbicides is to have no spillages or accidents, but in the real world some will occur, and it is important that the potential hazards of such events are put in perspective.

This paper presents some personal views of one who has been involved in public issues with herbicides in New Zealand which undoubtedly have relevance to the situation in Australia. There is no need to demonstrate that a major problem exists, but I believe it is necessary to cover the scope of the problem and identify the major contributors.

Scope of the problem.

A general description of the major groups involved in herbicide (pesticide) issues can be summarized as follows:

(1) The User Group.

In New Zealand approximately 20 percent of the population is employed in the rural sector where most herbicides are used. These people are comparatively well informed on the herbicides which they use due to experience in working with them, and much of the extension work of both Government and Industry has been directed towards the user. If they require some further information they normally know who to contact. In general they will not become involved in an issue unless they are specifically named or they can see a valuable product which they use being removed for a non-scientific political reason.

## (2) The Urban Group

This forms the majority of the population which has comparatively little or no direct exposure to the use of herbicides except around the home garden. These people obtain their information and form their personal views from what they hear, read or see on radio, television or the newspapers. Their access or interest in technical literature on herbicides is for practical purposes non-existent. If they do require technical information they are often not sure whom to approach. No politician can ignore the feelings of the majority and survive so one can understand the pressure of putting emotion before fact on an issue in order to politically survive. Regrettably political decisions based on emotions are occurring around the world with greater frequency.

## (3) Anti Chemical Minority.

This is a very vociferous minority group who regularly promote their cause through the media. Often the statements are emotional and based primarily on information obtained from the popular press. Whatever the personal reason for these people taking this stance, they are dedicated and persistent and will not cease on an issue until they lose credibility or are unable to claim a victory. Regrettably there have been instances of irresponsible actions by marketers and users of herbicides, and this minority group serves a useful purpose in monitoring operations to prevent further mishaps.

## (4) The communicators and opinion formers.

Although very small in numbers this group is the key to communication. The media gather and interpret facts and opinions before supplying information to the public at large. With notable exceptions these people have none or little technical background regarding herbicides and work under severe restrictions of time and space. Apart from staff of rural publications most have little general understanding of how herbicides are used in the rural sector and little interest unless it is related to a specific story which is usually a negative one as far as industry is concerned. In New Zealand, particularly in the rural towns, there is almost continual movement between jobs at the junior and reporter level so one can expect little continuous contact.

## (5) Industry, scientists and extension workers.

Relatively few in numbers and in many instances a very introspective group. To the public this group is perceived as secretive, having little idea of the realities of life and not interested in explaining matters to the ignorant public. Some believe the scientist looks on the public as guinea pigs or test species while industry only views it as a source of profit and thus has a vested interest. The favourite quotation when approached is "no comment".

Facts to communicate. This discussion deals with the urban and communicator groups as the user group is comparatively well informed.

What information on herbicides do the people in the urban group require to satisfy them that they are not threatened? The following list is not exhaustive but does cover some of the main concerns which do exist.

(a) All want an assurance that the herbicide is safe and expect a black and white answer with no qualifications and in simple language that can be understood. This may sound unreasonable to us who are prevented by law from claiming a product is safe and from a scientist that knows complete assurances on biological matters stretching into the future are not possible, but it is a fact of life.

(b) Most people are unaware of the testing procedures and registration requirements before the sale of a herbicide and are much more suspicious of herbicides than other chemicals used in their daily lives which have much less stringent health requirements.

(c) It is a commonly accepted view that naturally occurring chemicals are safe and synthetic chemicals are not, and this view is promoted by the anti-chemical lobby.

(d) The difference between the terms toxicity and hazard is not understood. Great concern is generated by the presence of relatively toxic compounds whatever the quantities or the negligible risk of exposure. Little effort is made to put the degree of hazard in perspective.

(e) All people employed by companies manufacturing and marketing herbicides are suspected of having a "vested" interest and will only present the facts that will suit their objective of selling maximum volumes of product.

(f) The urban group shows little concern with the withdrawal of a product from the rural scene unless it can be proved that it will markedly increase the price of food he purchases. Because they seldom have direct contact with herbicides and the most memorable material they read about them is sensational and negative they have a genuine fear. Most of us fear what we do not understand.

(g) Cancer creates a real fear with most people. When the word is connected with herbicides it generates widespread concern and emotional judgement in the lay person.

Communication. The question posed is how does one present sound scientific facts in simple language that the media can readily interpret and present to the public and the politicians? The main aim of the exercise is to present a credible and truthful alternative to the anti-chemical lobby's message to the urban group. It is unlikely that most of the anti-chemical lobby will change their views when presented with facts, however they may if these facts are presented correctly.

The most effective way of getting the message across to the public is by using the media which is set up for this purpose. This is the most economic and cost effective way. Contact the local reporters and point out you are readily available for comment on issues concerned with herbicides. You may be able to supply background information or purely direct a particular enquiry to the person who is in the best position to reply. You will be providing an alternative view which any sound professional reporter should welcome. It will take regular contact to establish one's credibility as a useful source of information and comment. If a reporter is disinterested or prejudiced against you, express your dissatisfaction to his editor but be sure you have your facts right and a justifiable case.

Writing letters to the newspapers and magazines is one way of stating a point of view. One advantage to this approach is that one's statements are normally unedited, however the readership of such columns is lower than the general news section, and some of the public prefer to believe an independent spokesperson. Where possible, it is preferable to come to an arrangement with the editor to publish letters on the issue side by side on the same day to give readers a better perspective of the position.

Radio, and in particular "talk back" sessions are useful in answering queries from people on what questions worry them rather than what you believe are the important issues. The drawback to this type of programme is that it only reaches a limited audience, depending on the time of the day it is broadcast. An interview of both parties is likely to give the listening public a reasonable understanding of the various positions on an issue.

Undoubtedly television is a prime media for influencing public opinion, and unless one is in a live interview situation the severe restrictions on time and editing provide many opportunities for the message to become confused.

This association with the media requires considerable time involvement and also the need to respond immediately which may cause scheduling problems in remainder of one's job. It is essential to obtain full commitment of senior personnel in the various organisations that this job requires top priority. Very few scientists or advisers have been trained in the art of communication, particularly television, and thus training is essential. Likewise, it is essential to obtain professional help in identifying media contacts and having someone on which to test out ideas. To be most effective, contact with the media should include written material which can be left for study and background.

Other means of communicating the use and value of herbicides are at meetings, workshops, posters, publication and schools. Organising a public meeting at a central place for a local issue where all parties are able to air their views is useful, and preferably arrangements should be made for at least one "independent" person to speak in addition to the two opposing parties.

These comments have been largely confined to the response to the media concerning issues and will not cover the educational role of putting the use of herbicides in perspective through groups such as schools and service organisations. Similarly, I do not intend to provide detailed answers to the questions asked by the urban public as I believe these are best handled in an individualistic manner.

One must accept that although the issues are based on science, emotion often takes over from logic, misreporting will occur and not every battle will be won, but providing one sticks to scientific facts and not speculative opinion in the end the majority of your views will have a good chance of being accepted. In conclusion, to be successful in getting across your point of view on herbicides, one must be as persistent as the opposition and patient, realizing that sound scientific facts wear well. In general terms, the public relations of those concerned in the area of weed science have been found wanting in the past, and a major effort will be required to restore the balance.