PRESIDENTIAL ADDRESS

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A GOOD DEAL has already been said in other places of the role that science must play if we are to reach our declared agricultural production targets in the years ahead. There is little doubt that the topics discussed at this Conference are of considerable importance in the general scheme of things. Obviously, to find solutions to our major weed, pest and disease problems would be to contribute significantly to the attainment of our goals.

Surprisingly, we have little idea just what weeds and pests are costing us today in terms of productivity. In all conscience, this is a gross deficiency. It is perfectly clear to me that, as other limiting factors such as low fertility and inadequate management skills are overcome, the depredations of weeds, pests and disease will assume an increasing significance. Before too long, the lack of knowledge on weed and pest control could prove a serious barrier to progress.

It is therefore extremely disturbing to find that, despite the existence of a very real stimulus, the major research institutions in New Zealand show an extraordinary disinterest in these topics. Let us look for a moment at weed control. I think it fair to say that our Conference is the main forum in the country for discussions on weeds and their control, and yet in recent years only two papers on this subject have come from the universities. Such a paltry contribution is in striking contrast to most other agriculturally advanced countries where universities are in the forefront at meetings of this kind. The complexities of the rapidly developing science of weed control demand the participation of the skilled staff and the research facilities of our universities. We need their contributions now but we will need them with even greater urgency in the future.

Our Conference has for several years offered an award of £25 per year to assist students specializing in some subject pertinent to weed control. On only two occasions has there been call on this award, despite quite urgent efforts on the part of your Executive to have the moneys suitably placed — surely a depressing indication of academic disinterest.

In New Zealand the only official agency contributing significantly to weed control is the newly constituted Research Division of the Department of Agriculture — and this in addition to its other multifarious research activities.

Surely such a matter of concern in a country priding itself on a high standard of agricultural technology becomes one of very serious concern when the academic and official apathy threatens to hinder the development of our farming industry.

In an age of rapid progress, when previously unknown chemicals can be synthesized, developed and marketed in a quite short period of time, some controls must be imposed to protect the using and consuming public. The action is proper and few people here will have argument with it. In New Zealand we are fortunate that our Agricultural Chemicals Board has a balanced viewpoint and generally manages to strike an acceptable compromise between what is ideal and what is reasonable. There are occasions, however, when the board is forced to adopt a restrictive attitude

because evidence is lacking on some point it considers relevant.

In an industrially young country such as New Zealand, with limited population and consequently limited markets, many agricultural chemical manufacturers cannot be equipped with elaborate research facilities nor can these be financially justified. If answers are required by the administration to permit the proper application of some potentially useful compound, then officialdom should assist in the collection of those data.

The alternative is classically illustrated in the plight of those unfortunate farmers in Canterbury presently facing a minor crisis because of the appearance of DDT-tolerant grass-grub (*Costelytra zealandica*). An economically acceptable insecticide which would solve the present problem is known to us but cannot be used because it poses a possible residue hazard.

Now, I agree that its use would not be prudent at this time. Equally, I do not find fault with the legislation which prohibits its use on ground of potential hazard. But I do find fault with an establishment that does not have at its command data which can say whether there is in fact a hazard when the need for that data was anticipated quite some time ago. Let us not fool ourselves: DDT tolerance is an established fact the world over. Its occurrence here was almost inevitable.

Hindsight is an easy talent to acquire. To anticipate problems of the future before they arise, and if possible have the solutions near at hand before the crises occur, not after disaster has struck, demands research at the academic as well as at the applied level. Not only must the strength of today's research groups be fortified and increased, but talents and facilities not yet tapped must be encouraged to contribute to the urgent task.

It is to be fervently hoped that the recently strengthened agricultural university departments of Plant and Horticultural Sciences and Agricultural Zoology will be able to devote at least some of their research efforts to a study of priority topics in weed science and agricultural entomology and pathology.