

A very successful discussion session, chaired by Dr. P. Jenkins, Victorian Plant Research Institute, Burnley, Victoria was held on the ecology, distribution and control of major bacterial diseases important to Australia. Diseases discussed were; *Xanthomonas oryzae* (rice blight), *Pseudomonas solanacearum* (wilt of potatoes, other members of the Solanaceae family and bananas), *Pseudomonas syringae* on stone fruit, *Xanthomonas pruni* (bacterial spot of peach and plum) and *Corynebacterium insidiosum* (lucerne wilt). A contributed paper session on current research projects was also included.

One highlight of the workshop was an evening session in which a simulated Fire Blight outbreak was presented by a pathogen panel. An action and executive panel then attempted eradication. Discussion was stimulated by a very active audience and ably chaired and adjudicated by Dr. D. W. Dye, Head of the Plant Bacteriology Section, Department of Scientific Industrial Research, Auckland, New Zealand. Many important aspects, including time taken to identify the pathogen and the high costs involved with delayed action were debated. This form of discussion may be of considerable value in future workshops.

The organizing committee is currently preparing a laboratory manual from the material presented at the workshop. This manual will include techniques used for isolation, identification and pathogenicity testing of bacterial pathogens as well as articles on the major bacterial disease discussed. The manual will be forwarded to all who attended the workshop and will eventually be available to other members of the Society and to Universities and Colleges of Advanced Education as a teaching aid.

Peter Fahy

## PRESIDENTIAL ADDRESS

### Plant Pathology in the Era of Relevant Research

R.H.TAYLOR

During the past decade society has adopted an increasingly critical attitude to science, and the research worker has come under pressure to solve problems quickly whilst being expected to obtain answers which will not increase costs or lead to further problems.

Such thoughts as these have been voiced frequently over the past few years, particularly in Europe and the United States, where such terms as "relevant research", "mission oriented research", "technology assessment" etc. are rapidly becoming part of scientific jargon.

Governments and funding organisations faced with ever mounting research costs have reflected the disquiet felt by society and are becoming more and more critical of what they are getting for their research dollar. They have queried the ability and the right of scientists to decide what problems should be worked on. For example, in the

U.K., in the face of strong opposition from scientists, we have seen a fundamental change in the approach to management of research, where following the Rothschild report the Government is commencing to adopt the role of the customer who contracts research out to the research councils.

All of these changes provide the setting in which Plant Pathologists work today and although many of us in Australia have as yet been unaffected by these changes, it is no good hoping that if we ignore them, they will go away. It is essential that the Australian Plant Pathology Society continually examines the role of the Plant Pathologists and asks where Plant Pathology is going, and how best we can satisfy our customers? Who are, in the simplest terms, the farmers who have an outlet for their produce or in the case of university people, the employers of graduates.

In Australia we are fortunate, that we provide our services to a nation which can still sell large quantities of agricultural produce and needs to produce as much as possible per acre to remain competitive on world markets. Also that we live in a nation affluent enough to spend an increasing amount of money on the preservation of the environment and on industries such as recreation and ornamental plants.

However, our customers in common with the rest of society are becoming increasingly critical of the value of our work to them. A research project which produces several papers, a conference or two, and indeed very valuable basic information, but no change in an industry, is not now very exciting to members of that industry, particularly if they are fighting a tough battle to remain efficient enough to survive.

The application of research to farming industries tends to favour the large operator and to put the small farmer out of business. Thus change is often unpalatable to many of our customers. Furthermore, a change which results in a worthwhile increase in efficiency of an industry on a national basis often provides little financial reward to the individuals in the industry who have had to work hard and make some difficult decisions to bring about the change. Hence in applied research we have to continually question the relevance of our research and ask how the results can be incorporated into industry. To do this we must be prepared to work in close co-operation with industry and to shoulder the time consuming and often frustrating load involved in getting to know an industry and to understand the viewpoint of its members.

As the pressure for relevance increases on those who serve industry directly, so it is inevitable that their needs will feed back to the Universities and demands will be made for the training of graduates to be relevant to the employers' needs. The educator can only gauge these needs by frequent contact with his customer, the employer. The A.P.P.S. is now active at the regional level and must increase these activities because the regional meetings provide an opportunity for Plant Pathologists from all types of employment to meet and to consider each other's viewpoints.

The challenges that face Plant Pathologists are no less today than they ever were and in the issues of our Newsletter published to date there is ample evidence that some old problems are only partially answered and that diseases new to our environment are being recorded almost every month.

Many of the diseases with which we now have to contend are insidious and losses are not obvious. Hence it is essential that we assess the losses these diseases cause in order to attract support from funding organisations and help from colleagues in related disciplines.

In order to tackle in an efficient manner problems that confront us it is essential that we pay considerable attention to the organisation and management of our research and extension services on a local and on a national basis. We must always bear in mind that the major cost of research is people and we must try to train and use these people as efficiently as possible. In Australia we are often criticised by overseas visitors and many local centralists about the overlaps which occur in our State system. This criticism often overlooks the many examples of very good co-operation between individuals and groups in Australia and some of the instances of excellent services provided under the present system. But, it is true that co-operation is difficult because of the lack of easy access between workers in the States, and yet the funds necessary to change this position are minor compared with the overall salary bills.

Co-operation between organisations is much more easily developed when several of them are involved in the same work, than when areas of work are handled by one institution to the exclusion of others. However, sharing of functions is essential and there is room for considerable rationalisation of our plant pathology training and service in Australia. It can only work if a sincere effort is made to have adequate consultation between organisations and the

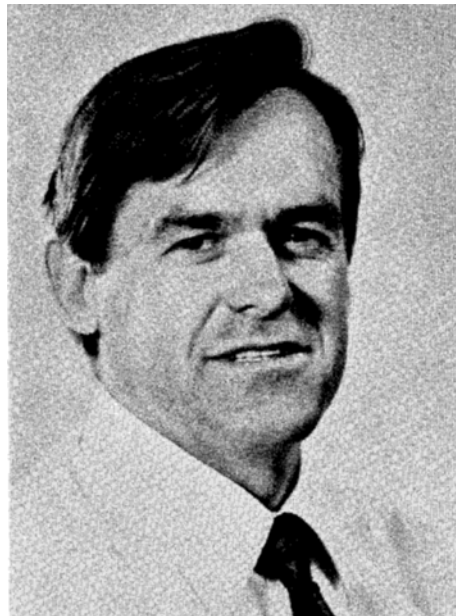
tensions which are often an inevitable part of co-operation are frankly discussed. The establishment of a Commonwealth-States Plant Pathology Committee along the lines of the Commonwealth-States Entomology Committee could be one important step which should be taken to help foster co-operation on a national basis.

The foregoing indicates some of the many aspects of plant pathology which we as a society should be thinking about and debating critically through every possible medium including our Newsletter. We face an era of change and of great pressure for us to provide instant service and answers to our customers. We must do our best to provide service but in so doing, not lose sight of the need to develop people with sound training in their disciplines before they become heavily involved in industry problems.

We also must do our best to see that our services are not eroded by those who would react impulsively to agricultural or political trends which are often of a short term nature.

To maintain strength for the future we must assure our customers of our value by doing things which are relevant to their needs and which they understand.

My approach for the present era was summed up recently by J. R. Pierce, Professor of Engineering at Cal. Tech. who said, "One must find challenging do-able things to do and then one must do them". I suspect that in doing the do-able we will uncover many underlying problems of a basic nature which must be solved if we are to get sound results and which in the solving will add the necessary intellectual spice to relevant research.



**R.H.TAYLOR**

*President, 1972*