

## Presidents of the Australasian Plant Pathology Society

### G.S. Purss

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In compiling these short biographies, use has been made of material supplied direct by the individuals and material published previously in Society publications. Dr. R.L. Dodman compiled the contribution about myself and made suggestions to many of the others. This assistance is greatly appreciated.

### Noel Thomas Flentje

#### President 1969–1971

The late Noel Flentje was born at Rochester, Victoria towards the end of 1921. He graduated B.Agr.Sc from Melbourne University in 1943. In 1944 he joined the Plant Pathology Department of the Waite Agricultural Research Institute and was awarded the degree of M.Sc. from the University of Adelaide in 1947 for a thesis entitled 'Study of pre-emergence rotting of wrinkled, seeded peas'. In 1948 he was appointed to the position of Assistant Plant Pathologist.

He was granted an overseas studentship from the Council for Scientific and Industrial Research and studied with Professor W. Brown at Imperial College in the University of London gaining a Ph.D. in 1950 for his work on variation in the physiology and pathogenicity of isolates of *Rhizoctonia* from English soils.

Noel returned to Adelaide in 1951 and was appointed to the position of Acting-Head of the Department of Plant Pathology, following the death of Mr. D.B. Adam. He was finally appointed to the first Chair of Plant Pathology, Waite Agricultural Research Institute, University of Adelaide in 1964. Under his strong leadership the Department established a world reputation in research. Strong links with the rural industries were also established, with the Department being responsible for many years for the direct service to growers provided in other States by the Departments of Agriculture. In 1970 he became the first formal Deputy Vice-Chancellor of the University of Adelaide. He died suddenly on 25 May 1974.

*Rhizoctonia solani* was responsible for severe disease in wheat and other crops in South Australia. Noel carried out research and published widely on the ecology, pathogenicity and genetics of this organism. He built up a strong post-graduate school around him and was frequently invited overseas to conferences and as a visiting lecturer. He had a particular affinity for students, being helpful to undergraduates and graduates alike.

Noel made considerable contributions to the profession throughout Australia. He was a dominant figure at national conferences where he had the capacity to draw arguments together and formulate meaningful resolutions. He showed an interest in developments at other institutions and I well remember the encouragement he gave to me in my early years as an administrator.

His contribution to the Society is documented in the history and cannot be over-emphasised.

### Robert H. Taylor

#### President 1971–1973

Bob Taylor graduated B.Agr.Sc. from Melbourne University in 1950 when he commenced his career as a plant pathologist with the Department of Agriculture, Victoria. From 1950 to 1969 he worked on a wide range of diseases, mainly of horticultural crops, and established a national reputation on viral diseases. He was involved in the establishment of several schemes for crop improvement based on pathogen testing and virus eradication. He made a particular contribution to the ornamental and grapevine

industries in this respect. Later he worked in association with Dr Lilian Fraser from New South Wales and Mr J. Morschel from Canberra in the development of National Repositories for virus tested fruit varieties. He was author or co-author of 37 research and general papers and was junior author in a chapter of the Australian Text Book on Viticulture.

He was appointed Principal Plant Pathologist at the Victorian Plant Research Institute at Burnley in 1969 and Chief Biologist in 1974. He became deeply involved in the development of a managerial approach to research. With his appointment as Assistant Director-General, Victorian Department of Agriculture in 1975 he widened his managerial responsibilities to the whole Plant Industry area. From 1985–1986 his managerial skills were utilised by the Health Department of Victoria as General Manager, Corporate Services.

In 1987 he became a private horticultural consultant working closely with the Flower-grower's Group of the Victorian Farmers Federation, the Nurserymen's Association of Victoria and the Nursery Industry Association of Australia. In 1990 he was appointed chairman of the Dried Fruit Research and Development Council.

In 1957 he was awarded the degree of M.Agr.Sc. by the University of Melbourne and was elected a fellow of the Australian Institute of Agricultural Science in 1986. He was the recipient of the managerial award of the Australian Flower Industry for services to Horticulture.

He says retiring is easy – he has done it at least twice and still thinks about it from time to time!

## Gordon S. Purss

### President 1973–1974

Gordon Purss was born in Sydney and attended Hurlstone Agricultural High School at Glenfield.

He graduated B.Sc.Agr. from the University of Sydney in 1948. He received the degree of M.Sc.Agr. from the University of Sydney in 1959, for which he presented a thesis on stem rot of cowpeas caused by *Phytophthora vignae*.

Gordon began his career in 1948 as a plant breeder with the NSW Department of Agriculture and was stationed at Yanco Experiment Farm for two years. His involvement with plant pathology commenced in 1950 when he moved to Queensland and took up a position as plant pathologist at Brisbane with the Department of Agriculture and Stock (later the Department of Primary Industries).

His initial work was on tropical fruits and one of his responsibilities was the development of a scheme to provide Lady Finger bananas free from Panama disease caused by *Fusarium oxysporum* f. sp. *cubense*. He was encouraged by J.H. Simmonds to develop his interest in disease resistance and his studies on Fusarium wilt of passion vine led to the development of effective field control. His interests moved to diseases of field crops and in particular to the previously unidentified disease of cowpeas caused by *Phytophthora vignae*. He identified sources of resistance to this disease and was responsible for the breeding and release of resistant cultivars.

In 1955 he established the first plant pathology laboratory at Kingaroy, initially in his own home. Crown rot of peanuts caused by *Aspergillus niger* had devastated crops for years and Gordon developed an effective control measure based on the use of mixed seed dressings. He also made research contributions to other diseases of peanuts, notably Verticillium wilt and Sclerotium rot.

In 1961 he moved to Toowoomba to the newly established Queensland Wheat Research Institute and in conjunction with T.C. McKnight began research on crown rot and common root rot in winter cereals. This laid the foundation for an on-going program on these diseases that has led to a detailed understanding of disease etiology and control. Sources of resistance to these diseases were also identified, paving the way towards the adoption of resistance as one of the goals for wheat breeding programs.

Gordon became Director of Plant Pathology Branch in 1967 and over the next 11 years developed and led one of the leading plant pathology groups in Australia, with research covering all aspects of tropical and sub-tropical diseases. Modern laboratories at Indooroopilly and many country centres were established under his leadership. In 1978 he became Deputy-Director of the Division of Plant Industry and then in

1980, Divisional Director, a position he held until his retirement in 1986.

In 1966, Gordon was awarded one of the first Winston Churchill Memorial Fellowship and spent 6 months visiting research institutions in the USA, Canada, the United Kingdom and India. He was President of the Queensland Branch of the Australian Institute of Agricultural Science in 1976 and in 1980 was made a Fellow of the Institute.

Gordon served on many state and national committees and developed a particular interest in a co-ordinated approach to crop protection, an interest that was fostered within QDPI during the latter years in his career.

His leadership was achieved with a quiet and considered approach and earned the respect of all those who worked with him. Gordon was always aware that plant pathology is a problem-solving discipline and ensured that his staff never lost sight of their prime purpose – disease control at the farm level. The developments in crop protection that occurred under his leadership have made a significant contribution to agriculture in Queensland.

Gordon now lives in retirement at Buderim, fully occupied with his hobbies – gardening, woodwork and lawn bowls.

## **Lionel L. Stubbs**

### **President 1974–1975**

Lionel Stubbs was born in Victoria in 1916 and graduated B.Agr.Sc. in 1939 from the University of Melbourne. His first appointment was as an Assistant Entomologist in the Department of Agriculture, Victoria but in 1940 transferred to Plant Pathology. High priority was given to vegetable and vegetable seed production during those war years and Lionel worked on seed-borne diseases. He developed an interest in viral diseases and he made an outstanding contribution in his studies of carrot motley dwarf which earned him a M.Agr.Sc. degree. It also gave him international recognition. He continued to make such contributions throughout his 30 year career with the Department and has a prolific publication record.

He held a Harkness Fellowship 1955–56 at the University of California, Berkeley working on viral diseases of horticultural and vegetable crops.

On his return he played a leading role in the development, as a world class establishment, of the Plant Research Institute at Burnley and in particular the virus research centre. Many young practitioners from around Australia spent periods of training at the centre which attracted many overseas scientists as visitors and researchers. He championed the cause for plant virus research throughout Australia by resolutions to the Standing Committee of Agriculture at various Australian Plant Pathology Conferences. One such resolution laid the foundation for the development of virus tested crop repositories.

In 1965 he was awarded the degree of D.Agr.Sc. by the University of Melbourne for his original contributions to Plant Virology. In 1966 he received the Medal of the Australian Institute of Agricultural Science. He was elected a Fellow of the Institute in 1978.

He was Chairman of the Organising Committee of the 1966 Australian Plant Pathology Conference at Toowoomba at which the resolution to establish the APPS was passed. He was elected to the Steering Committee which developed the concept.

In 1969 he was invited to become Professor of Agriculture (Plant Pathology) at the University of Melbourne. His intellectual capacity, commitment and tenacity came to the fore in the development of courses and facilities for the Plant Sciences. His capacity to challenge old ideas and put forward new ones and his vast practical experience were ideal backgrounds for this University leadership role.

He has held many prominent positions such as a member, and then Chairman, of the Committee of Reference of the Reserve Bank of Australia which recommended Rural Research Grants and the Victorian Wheat Industry Research Committee.

Lionel retired in 1981, earning the title of Emeritus Professor. He is still a fisherman, an art he learnt from his grandfather as a small boy, and is a keen gardener.

## Graeme Evans

### President 1975–1976

Graeme graduated B.Sc. (Hons) from Sydney University in 1961 majoring in plant pathology. He completed a Ph.D. at the same university under Professor Neville White in 1965.

He studied with Professor W.C. Synder at the University of California, Berkeley until 1966 as a post-doctoral fellow. It was there he developed his interest in *Verticillium* wilt of cotton. On his return to Australia he was appointed a Research Scientist with the Biology Branch of the NSW Department of Agriculture. He was stationed at Tamworth where he specialised in cotton diseases and, in particular, *Verticillium* wilt. From 1972–73 he continued his work with *Verticillium* as a National Research Fellow at the Canadian Department of Agriculture, Harrow, Ontario. He made very significant contributions to our understanding of the biology of *Verticillium dahliae* through studies on the survival of microsclerotia in soil. He was able to relate crop loss to population density.

In 1973, on his return to Australia, he was appointed Chief Biologist, Department of Agriculture, Rydalmere, a position he held until 1979.

In 1980 he was seconded to the Commonwealth as Director of the Council for Rural Research and Extension. After returning to the Biology Branch in 1983 for a short period, he was appointed to Plant Quarantine, Department of Health, Canberra and remained there until 1986.

Graeme was never one to dodge a difficult issue and in quarantine he undertook the task of re-examining nursery stock policy. The changes he recommended allowed freer access to new horticultural planting stock from overseas.

In 1986 he joined the Bureau of Resource Sciences (formerly Bureau of Rural Resources and Bureau of Rural Science) as a Principal Research Scientist. In this capacity he works as an analyst and has been involved in such subjects as Research and Development policy, acid soils, pesticide use, herbicide-resistant crops and cadmium in agriculture and food.

## Ronald C. Close

### President 1976–1978

Ron Close has a background in fruit and dairy farming. He studied at Auckland University College where he obtained a B.Sc. in botany and related subjects. He completed a M.Sc. in 1953 while serving part time as a plant quarantine officer with the Department of Agriculture. He was appointed a plant pathologist with the Plant Quarantine Service in Wellington in May 1953 and worked in that capacity until 1957. He regards this period as an important learning experience, not only in the complexities of plant quarantine but also in the range of diseases affecting plants both in New Zealand and overseas.

He served as a plant breeder with the Crop Research Division of DSIR at Lincoln from 1957 until 1965 carrying out studies on virus diseases of potato and developing resistant cultivars. From 1960 to 1962 he studied at Rothamsted Experiment Station and was awarded a Ph.D. from London University. His thesis was entitled 'Studies on the interactions between potato viruses when multiplying together in plants'.

His studies at the Crop Research Division showed that potato leaf roll virus was a major disease of potato. He developed a commercial control based on the application of systemic insecticides at planting time.

In 1965 he transferred to the Plant Diseases Division of DSIR at Lincoln. Over the next 8 years he worked on a wide range of diseases of wheat and legumes and also *Rhizobium* inoculation. While studying epidemiology and control of barley yellow dwarf virus and pea top yellow viruses he discovered a new virus, subterranean clover red leaf virus which was widespread in legume crops in New Zealand and of major importance. In 1972 he discovered bacterial wilt in lucerne for the first time in New Zealand.

Ron joined the staff of Lincoln College in 1973 as Senior Lecturer in Plant Pathology and was promoted to Reader in 1978. Although heavily involved in teaching mycology, plant disease management, plant protection and pesticide technology and in extension activities he continued research with post-graduate students

on a wide range of plant diseases. One notable achievement was the detection in 1980 of beet western yellows virus for the first time in New Zealand. His studies of hop viruses led to a scheme for producing virus tested hop plants.

He visited Australia in 1966 and attended the Australian Plant Pathology Conference at Toowoomba. He joined APPS as soon as it was formed in 1969 because he saw the need for close cooperation between Australia and New Zealand. He has actively promoted the Society in New Zealand and was the principal organiser for the symposium on 'Epidemiology and Crop-Loss Assessment' in 1977. He is now Chairman of the Organising Committee for the 10th APPS Conference 28–30 August 1995 at Lincoln College.

Ron has been a great advocate for the profession through his applied research activities and as an educator. Full retirement from Lincoln University occurred in July 1994.

## Clifford Jack Shepherd

### President 1978–1980

Jack Shepherd was born in Cambridge, England in 1921 and attended the County High School before entering Cambridge University in 1939. From 1940–1945 he served with the Parachute Regiment in the British Army. He returned to the University in 1945, graduating in 1948. He continued his studies under a Medical Research Council scholarship, obtaining an M.A. and Ph.D. in 1951 with a thesis on the tricarboxylic acid cycle in *Neurospora crassa*.

From 1951–53 he worked in Salisbury (now Harare) in South Rhodesia (now Zimbabwe) on the etiology and control of tobacco mosaic virus and on the effects of insecticides and nematocides on the soil microflora.

In 1954 he returned to Cambridge where he undertook studies on sulphur metabolism and the mode of action of anti-fungal antibiotics in *Aspergillus nidulans* at the Medical Research Council Unit for Chemical Microbiology.

He came to Australia in 1958 and joined the Division of Plant Industry, CSIRO, Canberra as head of the Microbiology Section where he worked on blue mould of tobacco. At this time

there was a concerted effort to incorporate resistance to this disease in commercial cultivars. Jack Shepherd's work on spore germination on the tobacco leaf allowed the isolation and maintenance of single-spore lines of the fungus, assisting greatly in the recognition of distinct pathogenic strains of the fungus in Australia. His work on the necrotrophic reaction to fungal infection enabled a quantitative measure of resistance in tobacco.

He later worked on the identification, distribution and significance of *Phytophthora* species in native communities at a time when the forests of Australia were being invaded by *P. cinnamomi*. He put special emphasis on the variation within *P. cinnamomi* and the use of numero-taxonomic methods of identification.

Jack also made notable contributions in more general areas of plant pathology. He compiled the first lists of plant pathologists in Australia and was also on the Steering Committee when the Society was established. Together with the late Professor N.T. Flentje he presented a report to the Advisory Council on Agriculture in 1960 on 'The Status and Development of Plant Pathology in Australia'.

He was a member of the Committee which investigated the feasibility of establishing repositories for virus-tested horticultural planting material and submitted a detailed report. These repositories ultimately came into being.

Jack always had an interest in the higher fungi and spent some time in New Guinea with an Alpha Helix Expedition working on luminous fungi. Since retiring to Forster, New South Wales in 1981 he has published a book on 'Mushrooms and Toadstools of Australia'.

## Allen Kerr

### President 1980–1983

Allen was born in Edinburgh, Scotland in 1926 and attended George Heriots School from 1934–1943. He graduated B. Sc. (Hons) from the University of Edinburgh in 1947. His first appointment was Assistant Mycologist to the North Scotland College of Agriculture. In 1951 he became Lecturer in Plant Pathology at the Waite Agricultural Research Institute, Uni-

versity of Adelaide and received a Ph.D. from that organisation in 1956. From 1963–1966 he was seconded to the Tea Research Institute, Sri Lanka and was then situated at the Waite Institute being appointed Reader in 1968, Professor in 1980 and Head of the Department of Plant Pathology in 1990. He retired at the end of 1991.

In his early work he was part of the team lead by Noel Flentje working on soilborne pathogenic fungi. His particular interests were in the interactions between host plants and pathogenic fungi, interactions between different pathogenic fungi, and the influence of soil moisture on infections.

In Sri Lanka he worked on the epidemiology of blister blight of tea, his work leading to control of the disease with minimum fungicidal spray applications.

Since his return from Sri Lanka he has achieved world recognition for his work on crown gall and its causal organism *Agrobacterium tumefaciens*. His studies on strains of the organism culminated in the isolation and use commercially of a non-pathogenic strain to prevent crown gall induction. This unique biological control method is now used widely in other parts of the world. By the use of genetic engineering techniques he has developed a new strain of *Agrobacterium radiobacter* which produces agrocin 84, the antibiotic produced *in situ* in non-pathogenic strains of *A. tumefaciens*. This *A. radiobacter* is now registered as a pesticide in New South Wales being incapable of transferring immunity to agrocin 84 to pathogenic strains of *A. tumefaciens*. This is the first genetically engineered organism to be released for general use.

This work was recognised, as mentioned, in the text on the history of the society, by the award of the inaugural Australia Prize in 1990. He had been previously honoured as a Fellow of the Royal Society, a Fellow of the Australian Academy of Science and by the Ruth Allen Award from the American Phytopathological Society. In 1991 Allen was elected a Foreign Associate of the National Academy of Sciences, USA and in 1992 he was made an Officer of the Order of Australia (AO). He was Vice-President of the International Society of Plant Pathology from 1978 to 1983.

It was fitting that he was our President when the International Congress of Plant Pathology

was held in Australia because he has brought great honour to both the science and practice of our profession.

## David Michael Griffin

### President 1983–1985

David Griffin was born in 1929. He attended the University of Cambridge majoring in Botany. He received the degree of B.A. in 1953, M.A. in 1956 and was awarded a Ph.D. in 1957 with a thesis entitled 'Fungi Pathogenic to Coniferous Seedlings in Forestry Nursery Beds'. In 1969 the University of Cambridge awarded him a Sc.D. for his collected articles on 'Studies on the Ecology and Taxonomy of Soil Fungi'.

He was appointed a Lecturer in Plant Pathology at the University of Sydney in 1955 and became Senior Lecturer in 1961 and Reader in 1967. He accepted an appointment as Master of Burgmann College, Australian National University in 1971 and became Professor of Forestry in 1975. He is now also Pro-Vice-Chancellor and Chair of the Board of the Faculties.

His extensive publication list bears testament to his wide ranging studies of soil fungi. He has, however, a particular interest in the soil physical factors and their effect on the ecology of soil fungi. His world standing in this field is reflected in the publication of a book in his own right and chapters in prestigious review publications. He has, however, published widely on other aspects of soil fungi and this partly reflects his interest in other colleagues and particularly his research students.

His interest in forestry has extended to the wider fields of education and assistance in overseas countries, particularly Nepal.

It is a credit to his commitment and intellectual capacity that he has been able to maintain research interests while holding high office in administrative positions at the Australian National University. I recall him telling me of his interest in the welfare of students when he took up his position of Master at the ANU. His interest in the impact of science in general and plant pathology, in particular, in the wider community was reflected in his McAlpine Memorial Lecture in 1978.

## Kenneth J. Scott

### President 1985–1987

Ken Scott graduated B.Sc.Agr. with First Class Honours in 1956 from the University of Sydney after an outstanding undergraduate career. He received a M.Sc.Agr. from the same university in 1957. He proceeded to studies at the Queen's University, Kingston, Canada where he received his Ph.D. in 1961.

He was a Post-Doctoral Fellow at the Waite Agricultural Research Institute in 1961 and a Research Associate at Brookhaven National Laboratory, Upton, New York in 1962.

Ken began his academic career in 1963 as Lecturer, then Senior Lecturer, in the Department of Biochemistry, University of Sydney. He became Reader in Botany at the University of Queensland in 1969. He was appointed to his present position of Professor of Biochemistry in 1972.

Over his career he has made outstanding contributions to our understanding of the biochemistry of host-parasite relationships, especially with cereals and their fungal pathogens. His early work with powdery mildew of cereals established him as a world leader in the area, a reputation he has maintained ever since. Working with colleagues at the University of Sydney he was the first to culture rust fungi and continued extensive studies on the biochemistry involved.

In more recent years his studies have extended to *in vitro* culture of immature embryos of wheat as a vital step in genetic engineering. This pioneering work has attracted recognition in the form of a Research Excellence Grant by the University of Queensland and the \$200 000 Bicentennial Benefaction of the Alumni Association of the University of Queensland.

His research contributions were recognised by the University of Sydney in 1993 by the conferring of the degree of D.Sc.Agr. Among his many awards are included the election as a Fellow to both the Australian Institute of Biology and the American Phytopathological Society.

In addition to his status as a most eminent scientist, he is a member of the Royal and Ancient Golf Club, St Andrews, Scotland. I suspect this makes him unique in our Society and probably a better golfer than most of us.

## Brian James Deverall

### President 1987–1989

Brian Deverall was born in Cheshire in England and showed an interest in plants, crops and gardening before the age of 10. His interest in botany and natural history developed further while attending Lymm Grammar School in Cheshire. He graduated B.Sc. (Hons) from the University of Edinburgh in 1957 after specialising in applied mycology in his fourth year. His fascination with disease resistance in plants and the underlying mechanisms led him to work with R.K.S. Wood at the Imperial College, London where he obtained his D.I.C. and Ph.D. in 1960. While holding a Harkness Fellowship he carried out post-doctoral research at the University of Wisconsin under J.C. Walker and at the University of Nebraska under J.M. Daly.

He returned to the University of London in 1962 as a Lecturer in the Department of Botany and Plant Technology, Imperial College. In 1970 he joined the Agricultural Research Council Unit on Systemic Fungicides at Wye College at the Imperial College. He left this position in 1973 to take up the position of Professor of Plant Pathology at the University of Sydney. He was head of the Department of Plant Pathology and Agricultural Entomology from 1973–1992 and was Chairman of the University's Committee for Graduate Studies from 1987–1991.

Brian is a world authority on the physiology of disease resistance in plants and fungal physiology. His wide ranging studies on subjects such as anti-fungal activity in plants, phytoalexins, toxins and plant pathogenesis, induced resistance and the nature of rust resistance in wheat have led to the publication of authoritative text books in his own name and many review chapters in general text books. He was honoured while at Imperial College by the award of the Thomas Huxley Medal for his work on phytoalexins.

Brian has participated in each International Congress of Plant Pathology since 1968 and was Vice-President of the International Society of Plant Pathology (ISPP) from 1988–1993.

With T.F. Preece he established the international journal *Physiological Plant Pathology* in 1971. He is now editor of the Newsletter of ISPP.

He chaired a Review of Plant Pathology Research in Australia for CSIRO in 1982.

He maintains an enthusiasm for cricket which goes back to his Grammar School days.

## **Robert H. Brown**

### **President 1989–1991**

Robert Brown was born in 1940 at Lautoka, Fiji. He graduated B.Sc.Agr. from the University of Sydney in 1964. He received the degree of M.Agr.Sc. from the University of Melbourne in 1973 and D.Agr.Sc. in 1986.

He commenced his career as a plant pathologist in 1965 at the Biological and Chemical Research Institute, Rydalmere where he did research on nematode diseases. In 1966 he took up an appointment with the Victorian Department of Agriculture at the Plant Research Institute, Burnley. He carried out research on cereal cyst nematode on funds provided by the wheat industry. After a period with DSIR in New Zealand in 1977 as an Anzac Fellow working on potato cyst nematode he became Section Leader at Burnley in charge of research on nematodes and plant diseases caused by them. He also supervised the diagnostic and identification plant protection service provided at Burnley.

In 1987 he moved to the Crop Care Division of ICI Australia where he was responsible for field research to develop agricultural chemicals. Later he became Research and Technology Manager.

In 1992 he set up his own Agricultural Management and Consultancy company in Melbourne. In addition to advice on plant protection matters he is concerned with the commercialisation of research and management of research and development projects. He is also a Senior Research Associate in the School of Agriculture and Forestry at the University of Melbourne.

Robert has demonstrated considerable research ability in his work on the biology and control of cereal cyst nematode of wheat. His later work on chemical control of root diseases in wheat is also highly significant. He has published widely in text books and scientific journals and has demonstrated a capacity to communicate research findings.

His organising ability is clearly evident in his career in private industry where he has been responsible for developing research and development programs with agricultural chemicals and biological control agents. This work has been carried out overseas as well as in Australia.

## **Alan Christopher Hayward**

### **President 1991–1993**

Chris Hayward was born in 1932 at Birmingham in England and like many English children of that time his early schooling was disrupted by wartime bombing. He graduated B.Sc. (Hons) from the University of Birmingham in 1953. He received a Doctor of Philosophy from that institution in 1956 working on lactobacilli under Professor Kenneth A. Bisset. He was attracted to plant pathology in his undergraduate studies by the lectures of the late C.J. Hickman.

He has been a bacteriologist all his working life, commencing as a Process Microbiologist at the Microbiological Research Institute, Port of Spain, Trinidad, West Indies from 1956 to 1958.

Chris established an identification service for plant pathogenic bacteria at the Commonwealth Mycological Institute in 1959 and continued there until 1965. I'm sure many Society members made use of this outstanding service. Chris obviously liked the atmosphere of the Institute, now the International Mycological Institute, as he recalls in the reminiscences he recently wrote. He particularly liked the close relationship which developed with the clients and their problems. This friendliness is still very evident to all those who have worked closely with him.

In 1965 he moved to Australia when appointed Lecturer in Microbiology at the University of Queensland. He was promoted to Senior Lecturer in 1968 and to Reader in 1978.

He is outstanding in the field of bacterial identification as shown by his many publications as a joint author with field pathologists throughout Australia and indeed the world. He has also made many significant contributions in the study of bacterial plant diseases. His work with bacterial diseases of sugarcane, bacterial wilt, and ice-nucleation activity in *Pseudomonas syringae*

are but a few examples. His invitation to write a chapter in the Annual Review of Phytopathology on Biology and Epidemiology of Bacterial Wilt caused by *Pseudomonas solanacearum* is evidence of his world-wide reputation. He has been involved in writing no less than ten chapters in plant pathology text books. He was part author of the book 'Bacterial wilt: the Disease and its Causative Agent *Pseudomonas solanacearum*' published by CAB International in 1994.

In addition to his fine research record he is regarded as an outstanding teacher, having received an award for excellence at the University of Queensland in 1991.

## Gordon Charles MacNish

### President 1993-

Gordon MacNish was born in 1938 and grew up on a sheep farm about 20 km south east of Collie in the south-west of Western Australia. He attended the local Collie High School before graduating B.Sc. (Ag.) from the University of Western Australian in 1960. After a short period in the Soil Conservation Branch of the Western Australian Department of Agriculture he transferred to the Plant Pathology Branch in early 1961 to work under W. P. Cass Smith. He obtained a wide experience in general plant pathology by acting as an assistant to the four plant pathologists who were rostered to answer all plant pathology enquires. After this period of general plant pathology experience, he specialised in vegetable pathology. His research mainly involved methods of controlling canker and leaf spot of parsnips (*Itersonilia pastinacae*), sclerotinia rot of vegetables (*Sclerotinia sclerotiorum*), powdery mildew of rock melons (*Erysiphe cichoracearum*), downy mildew of peas (*Peronospora viciae*) and pink rot of potatoes (*Phytophthora cryptogea*).

After completing a B.A. (majoring in Economics) in 1963 and M.Sc. (Ag.) preliminary examination in 1966, Gordon studied under N. T. Flentje, J. H. Warcup and R. L. Dodman at the Waite Agricultural Research Institute from 1968 to 1971. He was awarded a Ph. D. by the University of Adelaide as a result of these studies presenting a thesis entitled 'Studies on

the incidence and survival of *Ophiobolus graminis* in wheat-field soil'.

After returning to the Western Australia Department of Agriculture in 1971, Gordon concentrated mainly on root diseases of cereals and legume crops. He was also involved in testing cereal seed dressings for the control of cereal smuts and in investigations of the epiphytic of black-leg (*Leptosphaeria maculans*) that wiped out the rapeseed industry in Western Australia in the 1970s. From the mid 70s to the early 80s, Gordon's contributions to the investigations of cereal rot diseases included a major root disease survey over 10 years of all cereal growing regions of WA, the establishment of the importance of lupin break crops for the control of take-all (*Gaeumannomyces graminis* var. *tricii*) and pioneering work on the use of ammonium sources of nitrogen to ameliorate the effects of take-all on cereals.

In 1983-84, Gordon spent a year at Oregon State University during the tenure of a Charles and Anne Neumann Fellowship from the University of Western Australia. While in Oregon, he worked with Professor Bob Powelson on the effects of chloride on take-all, the effects on take-all of a single application of various sources of nitrogen verses regular application of the same sources and the effect of nutrient status of inoculum source on infectivity of *G. graminis* var. *tricii*. On returning to WA, he championed the use of grass-free cropping in association with break crops as a means of reducing take-all to very low levels. This approach and its adoption by many farmers have lead to remarkable increases in cereal production especially in wetter southern cereal regions of the WA cereal belt.

In recent years Gordon has investigated the aetiology of rhizoctonia bare patch (*Rhizoctonia solani* AG-8). In particular he has studied patch dynamics, the use of peptic isozyme and anastomosis techniques to study the spread of zymogram strains and the relationship of strains from different patches. In 1989, Gordon moved to Esperance to concentrate full time on a Grains Research and Development Corporation project on rhizoctonia bare patch disease of cereals and lupins. During the past three years Gordon has been a regular traveller to Alaska for a co-operative project with Professor Don Carling on the use of anastomosis techniques for the characterisation of *R solani* AG-8 and other AGs.