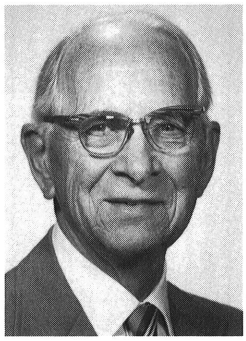
Fellows

Twelve members of The American Phytopathological Society were elected Fellows of the Society at the 1987 Annual Meeting in Cincinnati, Ohio. Election as a Fellow of the Society is a reflection of the high esteem in which a member is held by his colleagues. The award is given in recognition of outstanding contributions in extension, research, teaching, or other activity related to the science of plant pathology, to the profession, or to the Society.

Horace Leslie Barnett



Horace L. Barnett was born in Indianapolis, IN, February 19, 1906. He earned the B.A. degree from DePauw University in 1931, the M.S. degree from North Dakota State University in 1933, and the Ph.D. degree from Michigan State University in 1937. Before moving to West Virginia, Dr. Barnett held teaching/research positions at Michigan State University, New Mexico State University, California (USDA), and the University of Iowa.

Dr. Barnett joined the faculty of West Virginia University in 1945. During his 42-year tenure, he made innumerable contributions to plant pathology, biology, and agriculture through teaching, research, administration, and dedicated service to professional societies.

Dr. Barnett is known worldwide for his research contributions in fungus physiology. He joined with V. G. Lilly to develop one of the premiere research programs in fungus physiology. Throughout his career he sought to adopt his research on fungal physiology toward solving economic plant disease problems.

While studying the nutrition of the oak wilt fungus, he became interested in mycoparasites, and devoted much research to them until he retired in 1974. His pioneering studies over a 25-year period of these unique fungi yielded a wealth of valuable information to current efforts toward biocontrol. Elucidation of the mechanisms of parasitism and systematization on the basis of type of parasitism created a base on which the next generation can build. Emanating from this research was the discovery of a new growth factor, mycotrophein, required by five species of contact biotrophic mycoparasites.

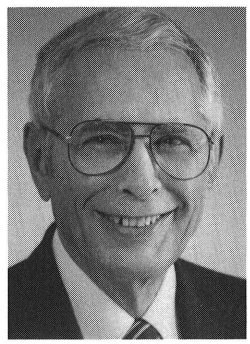
Dr. Barnett's research publications, beginning in 1933, together with articles and textbooks, total about 100. He authored two books, *Physiology of the Fungi* (with V. G. Lilly) and *Illustrated Genera of the Imperfect Fungi* (joined by B. B. Hunter for the third and fourth editions). These books are found in plant pathology laboratories around the world.

Dr. Barnett taught mycology, physiology of fungi (with V. G. Lilly), and taxonomy of the fungi from 1945 to 1975, and received outstanding teacher recognition. He was the major adviser for 13 M.S. and Ph.D. graduate students. As chairman of Plant Pathology and Bacteriology from 1960 to 1969, he administered a department that contributed significantly to research and to the education of prominent plant pathologists now actively serving the profession.

Both The American Phytopathological Society and the Mycological Society of America are indebted to Dr. Barnett for decades of effective service. He was president of the Mycological Society in 1963. During Barnett's presidency of APS, the Society hosted the second International Congress of Plant Pathology in 1973. Also, he was president of the Potomac Division in 1963 and received the Distinguished Service Award from that division in 1985.

As a retired professor, Dr. Barnett continues to serve as an unofficial adviser, consultant, and counselor to both faculty and students.

Michael G. Boosalis



Michael G. Boosalis was born in Faribault, MN, in 1917. After graduation from high school, he entered the University of Minnesota, where in 1941 he received the B.S. degree with a major in plant pathology. In World War II he was a bombardier of heavy bombers and flew 50 combat missions over Europe. After the war, Michael returned to the University of Minnesota, where he received the masters and doctors degrees. In 1951 he accepted a position at the University of Nebraska. He continues to pursue an active program in teaching, extension, and research at this institution. Dr. Boosalis served as head of the Department of Plant Pathology from 1964 to 1984.

On arriving at the University of Nebraska, Dr. Boosalis turned his attention to the soilborne organisms. He studied hyperparasitism of *Rhizoctonia solani* by species of *Penicillium* and *Trichoderma*, and subsequently reviewed that subject for the *Annual Review of Phytopathology*. He was the first one to isolate *Talaromyces flavus* and show it is hyperparasitic to *Rhizoctonia solani.* Later, he worked with a soil-inhabiting basidiomycete, *Laetisaria arvalis*, that was parasitic to *Rhizoctonia* in culture and was effective in controlling damage to sugar beet when coated on seed in the field. With colleagues, Dr. Boosalis recently found that field applications of *L. arvalis* sclerotia were effective in reducing *R. solani.* His interest in soilborne organisms was extended to *Aphanomyces euteiches* and often-cited methods were devised for detection of *Aphanomyces* and *Rhizoctonia* propagules associated with plant debris. Dr. Boosalis and his co-workers, Mr. Charles Fenster and Dr. John Weihing, established the optimum date of planting wheat in western Nebraska for controlling root and crown rot induced by *Helminthosporium sativum.* Since 1965, this control measure has annually saved the growers several millions of dollars. Dr. Boosalis clearly demonstrated that the successful survival of *Helminthosporium sativum* in soil is due principally to the formation of chlamydospores within conidia and to the rapid formation of conidia on young hyphae developing from conidia germinating in a hostile environment. Dr. Boosalis' name is intimately associated with "ecofallow," a cropping conservation system that has gained wide acceptance in the Great Plains region. He and his colleagues have compared conventional tillage to ecofallow for differences in disease levels of sorghum and small grains. Recent research has included a study of vesicular-arbuscular mycorrhizae and their effects on drought tolerance in winter wheat. These research efforts, which extend over a 30-year

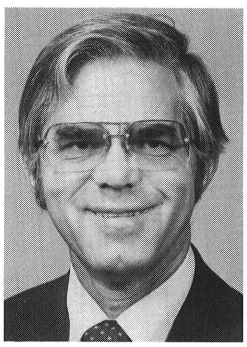
period, are unique in their relevance today. Biological control of plant diseases reduced tillage systems, and encouragement of mycorrhizae are only three of the areas in which Dr. Boosalis' studies have had scientific and economic impact.

A dedicated and excellent teacher, Dr. Boosalis has taught plant pathology courses every semester he has been at the University of Nebraska and has supervised a number of graduate students. As an effective extension teacher, he participated in numerous crop clinics and training sessions for growers and county agents.

As department head, Dr. Boosalis represented the interests of the total department and was an effective spokesman in support of those interests. During his term positions were added, and he represented the department in securing space in a new building. During this busy time he also was teaching, was active in extension, and had productive research programs.

Dr. Boosalis has served on numerous departmental, university, CSRS, regional, and APS committees. He was an associate editor of *Phytopathology* from 1964 to 1966 and of *Plant Disease* from 1984 to present.

Richard A. Frederiksen



Richard A. Frederiksen was born August 9, 1933, in Renville, MN. He completed a B.S. degree in agriculture in 1955, an M.S. degree in 1957, and following U.S. Army duty, finished his doctorate in plant pathology in 1961, all from the University of Minnesota. From 1956 to 1963 Dr. Frederiksen was employed by the USDA as an agent plant pathologist. In 1963 he joined the Texas A&M University faculty and progressed through the ranks to professor in 1973. He was visiting professor of plant pathology at Cornell University in 1985–1986.

While with the USDA Dr. Frederiksen had responsibilities for diseases of flax. His work led to a better understanding of vector relations of the aster yellows mycoplasma; to the description of crinkle, a new virus disease of flax; and to the development of pasmoresistant flax cultivars.

In Texas, Dr. Frederiksen expanded his work to include diseases of sorghum, maize, and pearl millet. Most of his early work led to a better understanding of sorghum downy mildew (SDM) in which he rapidly gained international recognition. With co-workers and graduate students, he developed SDM management programs for both sorghum and maize. These used host-plant resistance complemented with chemical and cultural controls. As a result, SDM has not significantly affected either sorghum or maize in Texas over the past decade. Similar programs have addressed anthracnose of sorghum and head smut of maize. By demonstrating to the sorghum seed industry the relative progress of the Texas Agricultural Experiment Station sorghum improvement team at annual field days, the seed industry adopted disease screening and evaluation procedures and rapidly incorporated host resistance germ plasm into sorghum cultivars. This work was recognized with the TAMU System's Award for Excellence in Team Research in 1981.

Dr. Frederiksen has worked with the International Sorghum and Millet Improvement Program (INTSORMIL) since its inception. INTSORMIL is one of the Title XII programs of the U.S. Agency for International Development (USAID). INTSORMIL is widely recognized as having made a major contribution to reducing hunger in Africa, especially Sudan, through the development of significantly higher yielding, disease resistant hybrids. Dr. Frederiksen helped organize the Sorghum Improvement Conference of North America (SICNA) in the early 1970s. He served on SICNA's Board of Directors, a term as its chairman, and as associate editor of its Sorghum Newsletter.

Dr. Frederiksen is recognized internationally as an authority on sorghum and maize diseases. He worked extensively with national programs in Africa, Asia, and South and Central America, helping to resolve problems with sorghum and maize production. His research has included cooperative ventures with International Crop Research Centers, The Rockefeller Foundation, and the USAID. He is a former member of the FAO Panel of Experts on integrated pest management.

Dr. Frederiksen has taught diseases of field crops annually since 1964 and currently team teaches an interdisciplinary course on host-plant resistance. He has taught physiology of parasitism, diagnosis of plant diseases, and introductory plant pathology. He is well known for working well with students and especially for helping foreign students adapt and mature as young professionals. He has worked in several capacities on all-university committees, including chairing the Library Council.

As a member of APS, he has served on four APS committees and chaired the Plant Quarantine and Regulatory and Tropical Plant Pathology committees. He was an associate editor for the *Plant Disease Reporter* and currently is an associate editor of APS Press. Dr. Frederiksen has served as APS representative to the International Society of Plant Pathology.

Stephen M. Garnsey

Stephen M. Garnsey was born August 3, 1937, in Oceanside, CA. He received a B.S. degree in botany at the University of California at Riverside in 1958 and a Ph.D. degree in plant pathology from the University of California at Davis in 1964. Dr. Garnsey joined the U.S. Department of Agriculture, Agricultural Research Service in 1963 as a research plant pathologist and has been at the Horticultural Research Laboratory in Orlando, FL, since that time. He was appointed to the graduate faculty of the University of Florida in 1975 and an adjunct professor in the Plant Pathology Department at the University of Florida in 1983.

Dr. Garnsey's recent research has been directed toward the identification, epidemiology, and control of citrus tristeza, the single most destructive virus disease of citrus. He demonstrated that the flexuous nucleoprotein particles associated with tristeza (CTV) infection were infectious and could be transmitted mechanically. Dr. Garnsey developed new extraction and purification techniques, and, with co-workers, developed serological procedures that have revolutionized indexing and detection of CTV. These procedures have also facilitated evaluation of CTV resistance in citrus relatives and significantly improved development of CTV-resistant hybrids to eliminate CTV-induced diseases that affect millions of citrus trees worldwide.

Dr. Garnsey discovered that citrus exocortis viroid could be mechanically transmitted on pruning tools, defined factors affecting transmission, and developed effective control procedures that have been accepted worldwide and have greatly reduced losses from exocortis. He discovered citrus rugose virus (CLRV) and purified it from citrus in sufficient quantities to characterize it and produce antisera. He demonstrated the first practical use of serology for citrus virus detection with antisera to CLRV and to citrus variegation virus. Dr. Garnsey also demonstrated mechanical transmission of citrus ringspot virus to citrus and herbaceous hosts, and helped elucidate its role in the psorosis complex.

Dr. Garnsey has served repeatedly as an international consultant

on citrus diseases, and is actively involved in cooperative international research programs. He has also helped organize and conduct workshops on pathogen detection methods and developed new research programs on exotic citrus pathogens.

Dr. Garnsey has served as president of the International Organization of Citrus Virologists (IOCV) and twice as coeditor of its proceedings. He has served as associate editor of the *Plant Disease Reporter*, and as Pathology Section editor for the *Proceedings of the International Citrus Congress*. He has served as technical advisor to the USDA-ARS for citrus pathology, and on numerous state, national, and international committees. He is vice-chairman of the APS Tropical Plant Pathology Committee and an associate editor for the forthcoming APS *Compendium on Citrus Diseases*. Dr. Garnsey has received the USDA Certificate of Merit twice for outstanding performance and leadership and the Consumer Services Award of Eminence from the Florida Department of Agriculture. In 1981, he was honored by APS with the Lee M. Hutchins Award for outstanding contributions to research on virus and viruslike infectious diseases of fruit plants.

Alva Morgan Golden

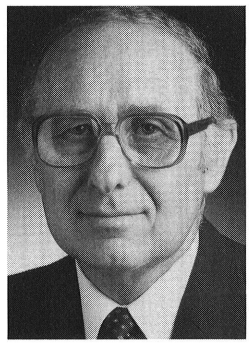
A. Morgan Golden was born on the family farm near Milledgeville, GA, July 13, 1920. He received his B.S. degree from the University of Georgia in 1950 and his M.S. in 1951. His thesis research focused on resistance of certain plants to root-knot nematodes. He served as an assistant plant pathologist at the University of Georgia, 1950–1951, and as a plant pathologist in fungicide development for the Vanderbilt Company in New York in 1951.

Dr. Golden has given 35 dedicated years of nematology research in the Agricultural Research Service, U.S. Department of Agriculture. He joined USDA at Beltsville in 1952, and worked the next four years primarily on taxonomy, host relations, and chemical control of root-knot and spiral nematodes. In 1956 he obtained his Ph.D. degree at the University of Maryland, providing the first comprehensive study of the taxonomy and biology of the spiral nematodes. He established a new ARS laboratory and program devoted to nematodes of sugar beets and rotation crops at Salinas, CA, in 1956, concentrating mainly on the biology and host-parasite relations of the sugar beet cyst and root-knot nematodes. He showed that resistance to the sugar beet cyst nematode in three wild *Beta* species was not due to morphological or other barriers to entrance of juveniles into roots, but probably to physiological factors within the plants. Late in 1959 he returned to Beltsville where he developed the present ARS research program on nematode taxonomy and morphology.

Dr. Golden established the USDA Nematode Collection and expanded this valuable resource which included material of earlier USDA workers. This collection is one of the largest and most valuable anywhere with over 27,000 catalogued slides and vials with specimens from worldwide sources. Of particular value is the Type Collection with designated type specimens of more than 1,200 species. Through some 150 publications Dr. Golden contributed significantly to our knowledge of nematology. In addition to describing many new genera and species, his monograph of the order Tylenchida is a major contribution to the systematics of plant-parasitic nematodes. Over the years he has identified nematodes for many colleagues and agencies. His multifaceted research also has included nematode-host relationships and management of these pests.

Dr. Golden is active in numerous national and international professional societies. He served as president, vice-president, and in other elective offices in both the Society of Nematologists and the Helminthological Society of Washington. Since 1979 he has served as president, board of trustees, Brayton H. Ransom Memorial Trust Fund. Currently, he is a member of the editorial boards of the *Proceedings of the Helminthological Society of Washington* and the *Pakistan Journal of Nematology*. He has been a member of APS since the early 1950s.

Cedric W. Kuhn



Cedric W. Kuhn was born on December 23, 1930, in Milroy, IN. He received his B.S. degree in 1956, M.S. degree in 1958, and Ph.D. degree in plant pathology in 1960, all from Purdue University. Dr. Kuhn was employed as assistant professor in the Department of Plant Pathology, Georgia Experiment Station, Experiment, immediately after he graduated from Purdue. He was the first plant virologist in Georgia, and he laid the foundation for his specialty program. He was promoted to associate professor in 1965, and served as head of the Department of Plant Pathology at the station from 1966 to 1968. He joined the teaching-research department, University of Georgia, Athens, in 1968, where he was promoted to professor in 1970.

At Experiment, Dr. Kuhn had to develop the research facilities as well as the research program. Through an NSF facilities grant in 1962 and an NIH research grant in 1964–1967, he built and equipped an excellent greenhouse-laboratory virology research facility. He also established the virology teaching program at the University of Georgia by commuting the 90 miles from Experiment to Athens to teach the first course in plant virology.

The goals of Dr. Kuhn's research are to probe biochemical, molecular, and genetic factors, both of viruses and their hosts, that are related to resistance. In cowpea chlorotic mottle virus (CCMV) infected plants, progeny virus declines in specific infectivity with age of infection. Development of improved methods of isolating RNA from the virus enabled Dr. Kuhn and colleagues to prove that the mechanism of inactivation of the virus was alteration of the virus coat protein rather than degradation of RNA.

The most recent phase of Dr. Kuhn's research involves studies of resistance which correlates disease reactions with virus replication and movement. Distinct levels of resistance have been identified in several virus-host systems, new resistance-breaking strains have been characterized, a defective viral replication system has been identified, specific biological functions have been assigned to portions of the CCMV genome, both host and virus genes controlling virus replication have been found, and the viral gene controlling virus movement has been located in the CCMV genome. It is anticipated that continued research will lead to new concepts concerning the nature of plant resistance to viruses.

Dr. Kuhn's classroom instruction is excellent as indicated by student evaluations. The personal characteristics that have led to his success in collaborative efforts with colleagues have enabled him to be a source of strength and to provide guidance to all his students.

Cedric is a member of Sigma Xi and Gamma Sigma Delta. He has served APS as an associate editor of *Phytopathology* (1972–1975) and *Plant Disease* (currently), on the subcommittee for ATCC collection of legume virus antisera, on the committee on virology, and on the committee on international cooperation. Dr. Kuhn was awarded the University of Georgia Alumni Association's Distinguished Faculty Award in 1975 and the Gamma Sigma Delta Faculty Award for Excellence in Research in 1981.

Frances Meehan Latterell

Frances Meehan Latterell was born December 21, 1920, in Kansas City, MO. She received her B.A. in biology from the University of Missouri-Kansas City (1942) and her M.S. (1947) and Ph.D. (1950) in plant pathology from Iowa State University under the direction of George McNew and the late J. C. Gilman. She has spent her career as a research plant pathologist at Frederick, MD, where she initially joined the U.S. Army Bio-Labs at Fort Detrick (1949), and later transferred (1971) to the USDA-ARS, now the Foreign Disease-Weed Science Research Unit.

Dr. Latterell's contributions to plant pathology and mycology have been diverse. As a graduate student, she gained international recognition for her discovery of a new major pathogen of oats, *Helminthosporium victoriae*. In collaboration with the late H. C. Murphy, she demonstrated that the phytotoxin, victorin, was the primary causal agent of Victoria blight of oats. This was the first conclusive evidence of disease specificity being related to the selective toxicity of a metabolic product of a fungal pathogen. This work has served as a model for research on many other diseases in which toxins play a role.

During her tenure at the U.S. Army Bio-Labs, Dr. Latterell contributed to numerous projects including studies of infection requirements and ultrastructure of urediniospores of form species of *Puccinia graminis*, and development of procedures for preservation and drying of soybean viruses. One of her notable achievements was the development of a process for preparation of dry spore products of fungal pathogens not amenable to production by standard industrial processes. Adaptations of this process are now being used to mass produce fungal spores for use as mycoherbicides.

Among Dr. Latterell's most significant contributions was her presentation in 1954 of the first experimental evidence for the existence of physiologic races in the rice blast pathogen, *Pyricularia oryzae*. Through testing of several thousand varieties of rice, she selected 10 cultivars and in 1960 she had characterized 15 physiologic races of the pathogen. This work provided the impetus for the establishment of an international system for race identification in *P. oryzae*. Among the eight rice cultivars adopted by international agreement as differentials, six were proposed by Dr. Latterell. Her recent research with P. L. Hunst has established the widespread presence of mycoviruses in *P. oryzae*.

Since joining the USDA, Dr. Latterell has concentrated on fungal pathogens of corn (maize). She was the first to elucidate infection requirements of the gray leaf spot pathogen, *Cercospora zeae-maydis*, and to find its perfect state, a species of *Mycosphaerella*. She recognized early the devastating spread of this disease northward in association with the increase in minimum-tillage practices by corn growers. She has a continuing interest in disease problems in Latin America, and has described three new diseases of maize from this region.

Dr. Latterell has been honored by many awards, including the Sigma Xi-RESA Award for Outstanding Research (1957), the U.S. Army Gold Medal for Exceptional Civilian Service (1958), the APS Ruth Allen Award (1973), Who's Who of American Women (1979), the APS Potomac Division Award for Distinguished Service to Plant Pathology (1987), and the NSF WISE Lifetime Achievement Award (1987). She has served APS in a number of capacities, including president and vice-president of the Potomac Division and councilor from the Potomac Division. She has served as associate editor of *Phytopathology* and the *Plant Disease Reporter*. She has been a member of APS and the Potomac Division since 1950, and is also a member of the Caribbean Division, the Mycological Society of America, and the British Society for Plant Pathology.

Roger H. Lawson

Roger H. Lawson was born January 21, 1937. He received his B.S. degree in 1960 and a Ph.D. in plant pathology in 1963, both from Oregon State University. He was awarded a Fulbright postdoctoral research fellowship in 1963 for research study at the Laboratory for Flower Bulb Research and the Agricultural University, The Netherlands. From 1964 to 1981, he was a research virologist at the U.S. Department of Agriculture, Beltsville, MD. Presently he is a research leader of the Florist and Nursery Crops Laboratory, Beltsville.

Dr. Lawson's research includes characterization of plant viruses and virus-related products of infection and investigation of the formation of virus and virus-induced inclusion bodies utilizing cytological and immunological techniques. He has initiated investigations in studies of virus-coded products of infection and virus transport and has used monoclonal antibodies to study virus relationships utilizing immunoelectron microscopy. Dr. Lawson has conducted studies on processes of revacuolation in evacuolated protoplasts in cooperative studies on the reformation of cell membranes. This research involves the development of new technology for genetic transformation in cell culture.

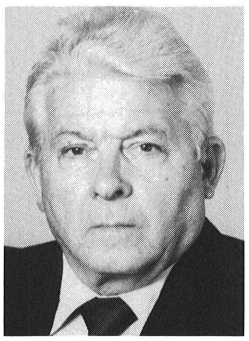
Dr. Lawson is recognized for his research on ornamental plants. This includes development of methods for virus detection and new information on host reactions to virus infection in controlled environments. These procedures have been incorporated into a state certification program for production of orchids free of cymbidium mosaic and tobacco mosaic viruses. This was the first certification program in the nation for production of orchids free of viruses.

Dr. Lawson initiated the development of financial support for a national program in plant virology at the American Type Culture Collection (ATCC). The program has provided plant viruses and antisera to type cultures for distribution to the scientific community. The project was expanded to include characterization of viruses and the preparation of antisera at the ATCC. Research in plant virus hybridoma technology was also initiated at the ATCC and is currently conducted at the U.S. Department of Agriculture at Beltsville. The research is recognized for contributions in plant virus hybridoma technology and for the development of many polyclonal antisera that are included in the ATCC bank of plant virus antisera.

Dr. Lawson's many contributions to APS include appointments as associate editor and senior editor of *Phytopathology* and service as APS representative to the ATCC. He has served as a member of the Virology Committee and chairman of the Collections and Germplasm Committee. He has also served as chairman of the Ornamentals Virus Working Group of the International Society for Horticultural Science. In 1980, he served as chairman of a National Work Conference on Microbial Collections of Major Importance to Agriculture and was responsible for publication of the conference proceedings by APS. He also served as vice-chairman and chairman of the AATC Board of Trustees. Dr. Lawson has authored or coauthored several book chapters and reviews on diseases of many different ornamental crops.

Dr. Lawson has received several honors including membership in Phi Kappa Phi, Sigma Xi, and Phi Sigma Society. He was designated an honorary life member by trustees of the American Orchid Society in recognition of contributions to orchidology on the nature and control of orchid virus diseases. He is a fellow of the Washington Academy of Sciences.

Gino Malaguti



Gino Malaguti was born on January 2, 1920, in Renazzo, Ferrara, Italy, where he completed his primary and secondary education. At the Faculty of Agrarian Sciences of the University of Bologna, he obtained his degree of Doctor of Agrarian Sciences with honors in 1943, winning the Francesco Cavani prize awarded to the student graduating with the highest grades. He was a graduate assistant at the university's Institute of Plant Pathology until 1946 and for two years did extension work for the Italian Ministry of Agriculture. In 1948 he moved to Maracay, Venezuela, to work for the Ministry of Agriculture in the phytopathology section of the Center for Agronomical Investigations. His responsibilitites included collaborating in the operation of a plant disease clinic and with the quarantine division.

Rather than limit himself to a few lines of research, he studied many different diseases in various crops, as outbreaks of new diseases occurred or known disease problems became more severe. This approach was influenced by the incipiency of plant pathology at that time in Venezuela and by the prevalence of diverse disease problems affecting a great variety of crops.

Dr. Malaguti was promoted to head of the Section of Phytopathology in 1958 and in 1970 was appointed National Coordinator of Phytopathological Programs; he held both positions until 1974. He continued working at the section in the position of Investigador V until his retirement in 1984.

One of his early studies was on diseases of cacao. Especially important was his research on the Ceratocystis stem necrosis that devastated cacao plantations during the 1950s in Venezuela and later appeared in other South American countries. He was the first to thoroughly study this phenomenon and to call attention to its threat to cacao cultivation.

Sesame is Venezuela's main oil-producing crop, but its high susceptibility to diseases prevalent in the growing area threatened its survival. In his comprehensive study of the diseases, Dr. Malaguti determined that soilborne Fusarium wilt, Phytophthora crown rot, and Macrophomina black leg were the limiting factors for this crop. He collaborated in the detection of sources of resistance, which led to the breeding of cultivars resistant to the three diseases. Use of the cultivars has made possible large-scale cultivation of sesame, ensuring Venezuela's position as one of the world's major producers.

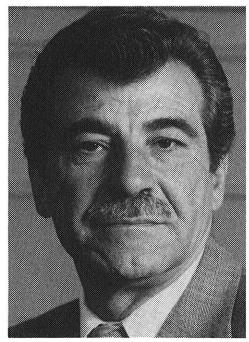
Dr. Malaguti is also an expert on the downy mildews of maize and sorghum, especially on the role of collateral hosts in infections by these pathogens. He determined that the wild perennial sorghums play a key role in the disease cycle of sorghum downy mildew in Venezuela, ensuring the survival of the fungus, which produces both conidia and oospores.

He was professor of plant protection at the Practical Agriculture School of the Ministry of Agriculture, Turmero, Aragua state, from 1954 to 1963. He also lectured on plant pathology at the Faculty of Agronomy of Universidad Central de Venezuela, first as associate professor from 1958 to 1973 and since 1973 as head of the chairs of phytopathology and of diseases of tropical crops.

Dr. Malaguti served as president of the APS Caribbean Division (1965–1966) and as president of the Venezuelan Phytopathological Society (1985–1987). He was also coordinator of the Organizing Committee of the International Workshop on Downy Mildew of Corn and Sorghum held in Maracay in 1977.

For his contributions to agriculture and plant pathology, Dr. Malaguti has received the Order Andres Bello of the Republic of Venezuela, Order Jose Maria Vargas of the Universidad Central de Venezuela, and plaques of recognition from the Ministry of Agriculture, Universidad Central de Venezuela, and Sociedad Venezolana de Fitopatologia.

Srecko M. (John) Mircetich



Srecko M. (John) Mircetich was born September 2, 1926, in Serbia, Yugoslavia. He earned an engineer of agronomy degree in 1952 from the University of Sarajevo and a plant protection specialist degree in 1954 from the University of Belgrade. His Ph.D. was in plant pathology in 1966 from the University of California, Riverside.

Dr. Mircetich worked in Yugoslavia in the Plant Protection Department, University of Sarajevo, 1950–1952; at the Subtropical Agriculture Experiment Station at Bar from 1952 to 1953; at the University of Belgrade from 1953 to 1954; and was head and plant pathologist, Department of Plant Protection, Bar, from 1954 to 1957. He then immigrated to the United States and worked as a research associate, U.C. Riverside, from 1958 to 1965. After obtaining his doctorate in 1966, he was appointed research plant pathologist, USDA, ARS, first at Beltsville, MD, and in 1972 at the University of California, Davis. He is currently research plant pathologist, USDA, ARS, and lecturer at U.C. Davis.

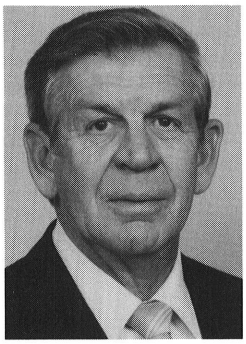
Dr. Mircetich is recognized for his work on the diagnosis and control of diseases of tree fruits and nuts, particularly diseases of complex etiology. He showed for the first time that the long-standing problem of high incidence of declining and dead deciduous fruit and nut trees associated with root and crown rot in California is caused by *Phytophthora* rather than by previously assumed noninfectious, so-called "wet feet" and "sour sap." His research revealed that more than 14 different *Phytophthora* spp. are commonly associated with and cause root and crown rot leading to decline and death of almond, peach, apricot, apple, prune, plum, cherry, and walnut trees in California orchards. His research has contributed significantly to a better understanding of the effects of various levels of soil moisture and duration of flooding on behavior of *Phytophthora* spp. and to elucidation of the relative resistance of various rootstocks of fruit and nut trees to different *Phytophthora* spp. His research on the role of surface irrigation water in the introduction and dissemination of *Phytophthora* spp. in orchards served as a basis for formulation of control measures for Phytophthora root and crown rot.

He also determined the etiological agents and developed controls for several other long-standing disorders previously diagnosed as "physiological" and "noninfectious." He and his associates showed that almond leaf scorch is caused by a fastidious, xylem-limited, graft-transmissible, leaf hopper-vectored bacterium; that walnut blackline is a hypersensitive reaction of standard *Juglans hindsii* and Paradox rootstocks grafted to scions of English walnut infected with cherry leaf roll virus; that Prunus stem pitting is a specific, infectious, and graft-transmissible disease associated with a strain of soilborne, nematode-vectored tomato ringspot virus; and that prune brownline is associated with systemic infection of peach or Myrobalan rootstock by tomato ringspot virus that causes death (hypersensitive reaction) of cambium and phloem (brownline) at the graft union with the prune scion. Each of these diseases can now be controlled or have been controlled because of his research.

Dr. Mircetich has been recognized for his accomplishments by The Walnut Marketing Board of California, the board of directors of Diamond Walnut Growers Association, and the San Joaquin Cherry Growers and Industries Foundation, by APS with both the CIBA-Geigy and the Lee M. Hutchins Awards, by the International Society for Horticulture with the Society Certificate of Merit, and by the USDA with the ARS Scientist of the Year and USDA Superior Service Awards.

Dr. Mircetich has served as associate editor for *Plant Disease* and as a committee member of several professional organizations and societies. He has guided several graduate students at Davis.

Nathaniel (Dick) T. Powell



Nathaniel (Dick) T. Powell was born July 7, 1928, in Halifax County, Virginia. He received the B.S. degree in agronomy in 1950 at Virginia Polytechnic Institute and his M.S. and Ph.D. degrees in plant pathology at North Carolina State University in 1956 and 1958, respectively. He became an assistant professor of plant pathology at N.C. State in 1958, associate professor in 1962 and professor in 1967.

Dr. Powell has an enviable record of teaching and graduate education. Over a 20-year period, he was characterized by students as "enthusiastic, imaginative, stimulating, and exciting." An eloquent and inspiring lecturer, he established a personal relationship with each student, even in large classes. His lectures were noted for clarity and thoroughness. Dr. Powell also played a primary role in strengthening graduate education in plant pathology at North Carolina State University where some 18 graduate degrees were awarded under his direction. His unique contributions through teaching brought numerous honors. These include Outstanding Teacher Awards from the Agronomy Club, 1963, 1970, and 1979; Horticulture Club, 1979; N.C. State University, 1966 and 1969; and Special Alumni All-University Recognition Teacher in 1980. The latter awards conferred membership in the Academy of Outstanding Teachers at North Carolina State University.

Dr. Powell's research contributions focused on characterization of multiple pathogen interactions and disease complexes, the development of disease resistant cultivars, and the integration of basic and applied information into disease management systems. He demonstrated that resistance in certain cultivars to Fusarium wilt and black shank is broken by prior or simultaneous infection by root-knot nematodes. As a result of these investigations, several tobacco cultivars resistant to nematodes, fungi, bacteria, and viruses were released.

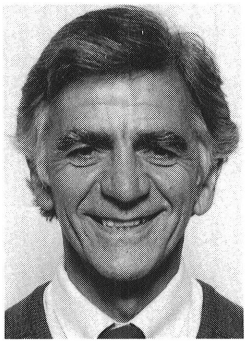
His research provided new information that enhanced our understanding of soilborne diseases. He emphasized their complex nature, and interfacing his research with the findings of other scientist, further confirmed the limitation of the "Doctrine of Specific Etiology" which dominated the thinking of early microbiologists. This emphasis led many breeders to develop resistance to multiple pathogens in many crops.

Dr. Powell's commitment to basic and applied research is reflected in his publications. The completion of necessary research to effect practical solutions is a hallmark of his career. Currently, his applied research is providing alternative control measures to hazardous pesticides. Equally important are the efforts he and his colleagues are making to characterize how the misuse of resistant cultivars is effecting drastic changes in the composition of root-knot nematode species and races affected by various cropping systems. This information base is serving as a model system for redirecting nematode-resistance-breeding programs and developing more effective disease management systems.

After two decades of successful classroom teaching and research, Dr. Powell assumed responsibility in 1982 for a program that involved a major commitment to extension. In a short 5-year period he has established one of the most successful extension programs in the United States. He has brought together in exemplary fashion, departmental and interdisciplinary resources, previously untapped, to enhance a widely acclaimed and appreciated program.

Dr. Powell is involved in a number of commodity, honor and professional organizations. In addition to eight awards as an outstanding instructor, he received a certificate of merit from Gamma Sigma Delta, a Philip Morris Distinguished Professorship, and the Distinguished Alumnus Award from Virginia Polytechnic Institute and State University.

Albert D. Rovira



Albert D. Rovira was born on March 4, 1928, at Cohuna, Victoria, Australia. He received his B.Ag.Sc. degree from the University of Melbourne in 1949 and his Ph.D. degree in soil microbiology from the University of Sydney in 1956. He was a teaching fellow in agricultural microbiology from 1951 to 1953, worked in soil microbiology research at the Royal Agricultural College, Uppsala, Sweden, and the Macaulay Institute for Soil Research, Aberdeen, Scotland, from 1954 to 1956, and was appointed a research scientist with the Commonwealth Scientific and Industrial Research Organization in Adelaide, South Australia, in 1956. He was a Senior Fulbright Fellow at Cornell University in 1961 and a senior research fellow at the University of Bristol, England, in 1972. In 1981, he was appointed head of soil biology in the CSIRO Division of Soils with major research groups in soil biochemistry, microbiology, root diseases, mycorrhizas, and soil zoology. In 1985, he was appointed coordinator of plant pathology in CSIRO.

Dr. Rovira is recognized for his work on plant root-microbe interactions that has ranged from fundamental studies to applied research in rhizosphere microbiology, root physiology, root health, and plant nutrition. He and a co-worker hypothesized in 1957 that the upsurge in microbial activity following tillage results from exposure of organic matter in protected microsites and not just improved aeration. This is the major cause of accelerated decline of organic matter with cultivation. He pioneered work on the nature and quantification of the organic compounds released as exudates from roots. His "Plant Root Exudates" in Botanical Reviews in 1969 was declared a Citation Classic by the U.S. Institute for Scientific Information. His research demonstrated that the microorganisms of the rhizosphere compete with roots for phosphate but may also enhance the uptake of phosphate depending on the age and species of plant and soil properties. He demonstrated that treatment of wheat seed with free-living nitrogen-fixing bacteria advanced flowering and increased wheat yields and showed that the response was not the result of an increased nitrogen supply. He initiated research on application of scanning and electron microscopy to study the rhizosphere that led to the book published by APS Press, *Ultrastructure of the Root-Soil Interface.* He was co-developer in 1970–1971 of a selective medium for fluorescent pseudomonads in soil that opened the way for present-day studies of this important group of soil bacteria as a component of the rhizosphere flora and potential biocontrol agents.

He demonstrated that soil fumigation increased wheat yields in Australia by up to 400% and that the response was due mainly to improved root health. He then changed the direction of his research to focus on soilborne plant pathogens. He initiated research on the SIRONEM soil test for cereal cyst nematode, which is used widely to identify high-risk fields requiring nematode control in Australia. He did the initial field testing of nematicides now used for control of cereal cyst nematode on wheat in Australia. His field research on the effects of rotation and cultivation on take-all and Rhizoctonia root rot of wheat, conducted as part of a study of conservation tillage practices, has provided basic information on the ecology and epidemiology of these diseases and led to management practices now in use to reduce the effects of these diseases. In 1985 he made two video films, "Disease-free Farming" and "Conservation Tillage and Root Diseases of Wheat" around the theme of controlling root diseases to enable conservation tillage to be successfully applied to cereal growing.

Dr. Rovira has published over 120 scientific papers, reviews, and chapters and jointly edited the *Proceedings of the Soil-borne Root*

Diseases Section of the 1983 International Plant Pathology Congress to produce the book *Ecology and Management of Soilborne Plant Pathogens*. He was awarded the Australian Medal of Agricultural Science in 1972 and made a fellow of the Australian Institute of Agricultural Science in 1978 for outstanding contributions to Australian agriculture. In 1986, he was elected a fellow of the Australian Academy for Technological Sciences for research and extension into the control of cereal root diseases. He is a member of the International Committee on Soilborne Plant Pathogens, the Australian Soil Science Society, The Australian Institute of Agricultural Science, the Crop Science Society of South Australia, and APS.