

nutritionally deficient mutants can attack resistant varieties of host if the appropriate nutrient is supplied with the inoculum.

Parasexual recombinations within heterokaryons of pea-wilt and banana-wilt *Fusaria* were indicated as one source of variability. The terminal cell in *Fusarium* was shown to be multinucleate and therefore potentially heterokaryotic, and Buxton suggested that a few pathogenic nuclei might survive in heterokaryons containing predominantly nuclei adapted to saprophytic existence in mycelia growing saprophytically in soil. Avirulent mycelia could thus constitute a reservoir from which pathogenic forms, with mainly pathogenic nuclei, could arise when selectively favoured by the proximity of a host plant. Buxton's work on pea-wilt threw important light on the mechanisms of resistance and susceptibility of plant to fungus by showing that exudates from roots of one variety of pea can inhibit growth of a race of *Fusarium oxysporum* f. *pisi* to which that variety is resistant, but stimulate another race to which it is susceptible. Further, he showed that when conidia of race-1 were held for 14 days in concentrated root exudates from a host plant resistant to race-1, some were modified into

race-2 pathogenicity. Genetic variability was Buxton's prime interest, but he was no narrow specialist; his 40 publications show his unusual versatility, as he was equally able and productive in practical work on disease control as in more academic studies. He also served as Secretary to the British Mycological Society's Plant Pathology Committee, and was on the Editorial Board of the *Journal of General Microbiology*.

With the award of a Kellogg Foundation fellowship, Buxton made his first visit to the United States in 1957. In 1958 he returned as the guest of the American Phytopathological Society to contribute to their golden jubilee meetings at Bloomington, Indiana, and in 1960 he went at the invitation of the United Fruit Co. to work for a year in their laboratories at Norwood, Mass., on *Fusarium* wilt of the banana.

His stimulating conversation, his ability to teach and his friendly personality explain why Buxton's laboratory was sought, not only by his colleagues, but also by visitors from other parts of the world. In 1950 he married Doreen Hampson of Ripley, Derbyshire, who survives him with their three sons. He gave to his family life the same zest as his research.

P. H. GREGORY

NEWS and VIEWS

Directorship of the Commonwealth Mycological Institute:

Dr. J. C. F. Hopkins, C.M.G.

DR. J. C. F. HOPKINS, who retired on September 30 from the directorship of the Commonwealth Mycological Institute, Kew, a position he had held since 1956 (*Nature*, 178, 1150; 1956), is well known as a versatile tropical plant pathologist. After service in the Royal Air Force during the First World War, he graduated from the University of London and continued his training in Trinidad at the Imperial College of Tropical Agriculture. For the next two years he worked in Uganda, then moved to Southern Rhodesia, where in the course of twenty-eight years he was successively mycologist, senior plant pathologist, and finally chief botanist and plant pathologist. An authority on diseases of tobacco in Africa, and the author of the standard book on this subject, Dr. Hopkins's services have been in much demand, and during recent years he has travelled widely both as a consultant and on behalf of his Institute and the Commonwealth Agricultural Bureaux. Under his directorship, in addition to a general expansion of the work of the Institute, a unit for the identification of plant pathogenic bacteria was successfully initiated. Dr. Hopkins has taken an active interest in the affairs of the Institute of Biology and besides serving on the Council has acted as chairman of the London Branch. In 1962, in recognition of his public services, Dr. Hopkins was appointed a Companion of the Order of St. Michael and St. George.

Dr. G. C. Ainsworth

DR. G. C. AINSWORTH, who has been appointed to succeed Dr. J. C. F. Hopkins as director of the Commonwealth Mycological Institute, obtained a London first-class honours degree in botany in 1930 and was awarded a Ph.D. in 1934. He showed an early interest in medicine, obtaining a Ph.C. in 1929 and was awarded the Pharmaceutical Society's silver medal and the Harrison Memorial Prize. From 1930 until 1939 he studied plant diseases at Rothamsted and Cheshunt, where he specialized in crop diseases, particularly those due to viruses. He was then appointed to the Commonwealth Mycological Institute and helped in the production of the *Review of Applied Mycology*; he also prepared a monograph on the British Ustilaginales. After the Second World War, his earlier interests became evident again and he was appointed head of the Mycological Department at the Wellcome Research

Laboratories working on antibiotics and developed research on the mycoses of man and animals. As a natural consequence, he was soon appointed a Wellcome Trustees Research Fellow in medical mycology at the London School of Hygiene and Tropical Medicine, and his insistence on accurate identification and correct nomenclature from that time onwards has had a marked effect on the development of this discipline, especially under the sponsorship of the Mycology Committee of the Medical Research Council, of which he was secretary for ten years. In 1948, he was appointed lecturer in botany at the University College of the South West of England (now University of Exeter), and was promoted reader in 1951. He continued his researches into the mycoses of animals, and the records of a two-year survey, supported by the Agricultural Research Council, of mycotic diseases of farm animals in Britain were transferred to the Central Research Laboratory, Weybridge, as the basis for a new veterinary mycology unit. But the call of the Commonwealth Mycological Institute proved too strong and he returned there to be made, in 1961, assistant director. He has been president of the British Mycological Society, but is probably best known throughout the world as the author of *The Dictionary of the Fungi*, the fifth edition of which has recently been published.

Registrar and Secretary to the Council for National Academic Awards :

Mr. F. R. Hornby, M.B.E.

MR. F. R. HORNBY has been appointed registrar and secretary to the Council for National Academic Awards. Mr. Hornby was educated at Heversham Grammar School, Westmorland, and Magdalene College, Cambridge, where he obtained first-class honours in the Natural Science Tripos, Parts I and II. He has taught in Highbury County Secondary School, London, and at Taunton School, Somerset. During the Second World War he served with the Royal Army Ordnance Corps and the Royal Army Education Corps, and attained the rank of Lt.-Colonel and was awarded an M.B.E. for services in North Africa and Italy. Before he became secretary of the National Council for Technological Awards in 1956 he was assistant education officer in the City of Nottingham Local Education Authority.

The charter and statutes of the new Council for National Academic Awards were published on September 25, and