The Scottish Crop Research Institute

SCRI is a non-profit-making limited company established under the Companies Act, has charitable status and is a Non-Departmental Public Body because over 50% of the total funding is received from Scottish Office, Agriculture, Environment and Fisheries Department (SOAEFD), and all members of the Governing Body are appointed by the Secretary of State for Scotland. Staff are not formal civil servants, but are members of the SOAEFD Superannuation Scheme, and SOAEFD funds any redundancies, the site, and much of its fabric and capital equipment. There is also a Management Statement and Financial Memorandum embodying the formal relationship with SOAEFD.

SCRI is a special centre of international excellence, bridging the public and private sectors, and noted for the high-quality, innovative research encompassing its entire programme. Whilst many PSREs in recent years have been closed, merged or rationalised, SCRI has evolved dynamically, expanding in a highly competitive market. In the last 15 years the site at Mylnefield has received huge investments in buildings, state-of-the-art scientific facilities, and new scientific staff. Independent Visiting Group reports; performance indicators (e.g. refereed papers per scientist, cost per refereed paper, grant income, EU income etc.); market impact measures (e.g. university courses presented, research student training etc.); attractiveness for senior visiting scientists, governmental teams and companies; value-for-money; and rate of expansion, are unequalled within the research service. Within the last six years the establishment of the dramatically successful, award-winning technology transfer company, Mylnefield Research Service Ltd, and the appointment of its outstanding Managing Director, Dr N.W. Kerby, has complemented the efforts in redirecting the science and linking with universities and other institutions at home and abroad.

As detailed in the SCRI Corporate Plan, the mission of the Institute is to undertake an integrated programme of fundamental and strategic multidisciplinary research of the highest quality on agricultural, horticultural and industrial crops, their pests and diseases, and on processes common to all plants; to create and protect wealth, and to improve the quality of life and the environment. It aims to increase knowledge of the basic biological sciences, to improve crop quality and utilisation, to improve biodiversity, agricultural sustainability and diversification, and to develop environmentally benign methods of protecting crops from depredation by pests, pathogens and weeds. A broad multidisciplinary approach to address the mission is a special strength of the Institute, employing and fostering the disciplines of genetics and breeding,

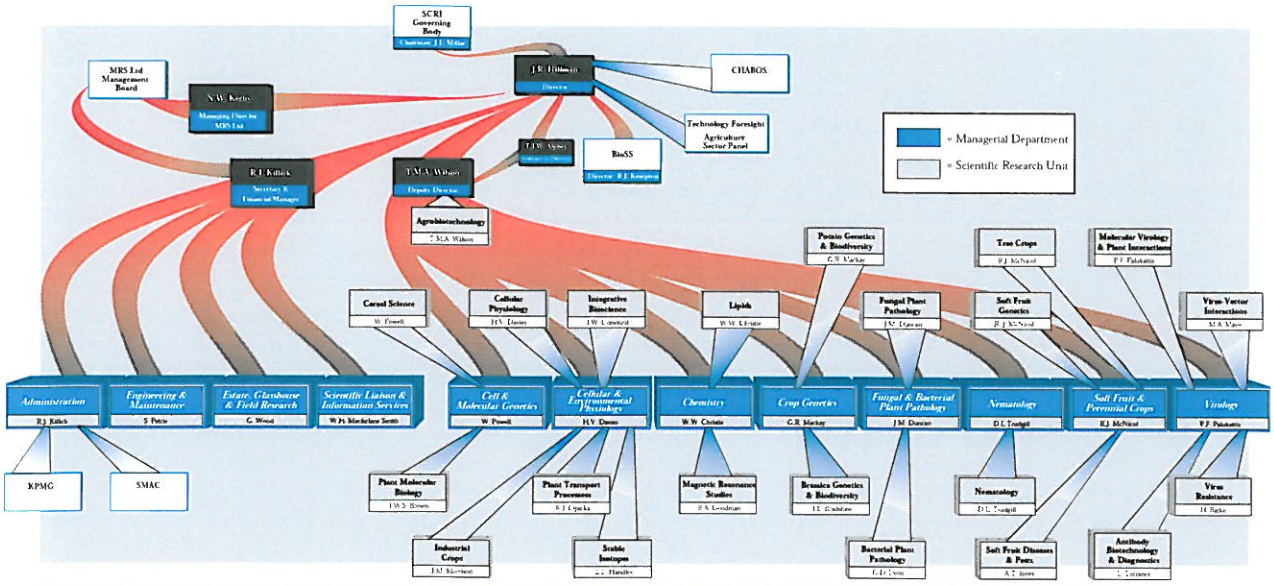

Figure 1 SCRI Departmental and Research Unit Structure.

molecular and cellular biology; pathology (virology, bacteriology, mycology, nematology and entomology); physiology (metabolic, environmental and developmental); chemistry and biochemistry; agronomy; ecology (molecular ecology, vegetation dynamics, bioremediation); serology; physics; mathematics and statistics. In 1995 the day-to-day scientific management and focus of the Institute was restructured with the formation of 22 research units .

The range of skills from fundamental studies on genetics and physiology, through agronomy and pathology to glasshouse and field trials with exploitation of SCRI-based international genetic resources in a region of high phytosanitary conditions, is unique within the UK. Synergistic and complementary liaison with other research organisations, universities and colleges in the UK and abroad is an integral part of the scientific development of the Institute. Such links are continually being developed and strengthened. SCRI and MRS Ltd actively seek research contracts from Government Departments and agencies, levy boards, grower organisations, international agencies, commercial companies, local government and trust funds.

SCRI acts as a parent body for Biomathematics and Statistics Scotland (BioSS), formerly the Scottish Agricultural Statistics Service (SASS), which acts as a unit of SCRI under the able leadership of R A Kempton. BioSS was set up in 1987 to cover the biomathematical and statistical needs of the five SABRIs and SAC. High-level consultancy, training and research inputs from BioSS give a major advantage to the SABRI and SAC research programmes. The next Visiting Group to BioSS was scheduled for early 1996.

Following the pattern of previous SCRI Annual Reports, this report details only a small selection of the research achievements of SCRI and MRS Ltd, briefly describes the commercial successes of MRS Ltd, and summarises the important linking role of the associated Friendly Society, the Scottish Society for Crop Research (SSCR; D.L. Hood, Secretary & Treasurer; T.P.M. Thomson, Chairman). Advances have been made in both fundamental and strategic science, with contributions to the protection and understanding of the environment, and discoveries are reported of direct and indirect benefit to agriculture, horticulture, forestry, land management and biotechnology. Dedicated and talented scientific and support staff in every department and section of the Institute, BioSS and MRS Ltd account for our stature, successes and delivery of achievements.

On behalf of the staff and Governing Body, it is a pleasure once again for me to acknowledge with gratitude the staff of SOAEFD for their continuing support of and commitment to our research programme and to our development. Regardless of the enormous pressures upon them, they function rigorously and fairly, as always, to the highest professional standards of British public service. Grants, contracts, donations, advice and joint participation in our activities from the SSCR, other governmental departments and their agencies, non-governmental agencies, grower levy boards, local and regional authorities, commercial companies, farmers and other individuals, and learned societies, are also warmly appreciated.

SCRI is buoyant and justifies its existence in every respect. We have every confidence in meeting future challenges; scientifically and commercially, our prospects are outstanding.