

Mylnefield Research Services

Nigel W. Kerby & Jonathan B. Snape

MRS, the commercial wholly-owned subsidiary of SCRI, was established in 1989 to enhance competitiveness, understand and fulfil the needs of industry and maximise the value of SCRI intellectual property and resources. MRS has grown steadily and continued to benefit SCRI through annual Gift Aid and provision of services, without any external financial assistance.

The Mission Statement of MRS is:

To develop commercially the SCRI's scientific expertise, resources and intellectual property, and to improve the quality of services to achieve new standards of excellence.

Finances The income of MRS increased to £1.99 million in 2005/2006 and MRS transferred £1.32 million to the SCRI Group, including £90K Gift Aid to the Mylnefield Trust and £125K Gift Aid to SCRI. This represents an increase of 63% on previous year's Gift Aid. Contract research (66%) was the biggest contributor to income, followed by lipid analysis (15%) and royalties (10%).

Innovation MRS values its industrial partnerships since they provide valuable market and technical information for the science programmes at SCRI in addition to cost effective product development.

Commercial research collaborations MRS develops long-term research collaborations with commercial partners through various schemes, including LINK projects. Currently MRS is involved in six LINK projects at SCRI:

- Developing molecular markers for raspberry root rot with the Horticultural Development Council (HDC).
- Developing molecular markers for raspberry quality with the HDC, Marks and Spencer plc, KG Growers Ltd, Thomson and Thomson Ltd and Redeva Ltd.
- Understanding the chemistry and genetics of potato flavour with the British Potato Council, Greenvale AP, Branston Ltd, BioSS and Sensory Scotland Ltd.
- Integrated pest management for raspberries with the HDC, KG Growers Ltd, Bayer Crop Science Ltd,

Waitrose Ltd, Cooperative Group Ltd., Berryworld Ltd., British Polythene Industries Ltd. and East Malling Research (EMR).

- Barley association genetics with 12 commercial partners including Syngenta Seeds, Coors Brewers, Svalöf Weibull and the Scotch Whisky Research Institute
- Improving the Vitamin C levels in blackcurrant with GlaxoSmithKline plc, EMR and the HDC.

Licensing and IP asset management Our IP portfolio is dominated by plant variety rights (55) but also includes five patents and five trademarks. We currently manage 490 licenses in 23 countries for potatoes, forage and salad rape, turnip, kale, blackcurrants, blackberry, raspberry and strawberry varieties. Varieties bred at SCRI are being trialled all over the world including Japan, China, Romania, Australia, Cuba and Egypt.

During 2006, MRS started collecting royalties for the production of Glen Lyon raspberries (380 hectares) in southern Spain. Glen Lyon is the number one variety in Spain. Success resulted from our close collaboration with our agents Eurosemillas as well as UK multiple retailers, importers, propagators and the Spanish legal system. We are introducing new varieties into this important rewarding market. Spanish raspberry production complements that of the UK since it provides fruit to the UK consumer out of season.



New varieties Mayan Gold was launched in autumn 2006 by our partner Greenvale AP into two UK supermarkets. This was the first time a variety of *Solanum tuberosum* Group Phureja, also known as *S. phureja*, was available to consumers and the launch received considerable national publicity.

Since 2003 a consortium, including SEERAD and MRS, has been investing in the development of new and superior raspberry cultivars. In July 2006 at 'Fruit for the



Glen Doll

Future' we launched the first variety (Glen Doll) from this programme.

The swede Lomond was launched by our partners Nickerson Advanta Ltd at a trade show in Edinburgh during November 2006.

Analytical services Mylnefield Lipid Analysis increased its business and held a successful workshop on omega-3 fatty acids in June 2006. A two day lecture course was held in October 2006 that attracted participants from a wide range of commercial and academic backgrounds.

MRS, together with Dr Charlie Scrimgeour of SCRI, offers a stable isotope analysis service. This business has grown significantly in recent years and is now a major contributor to turnover of MRS.

Developing markets In March 2006, MRS led an Agricultural Trade Mission, organised by the China Britain Business Council (CBBC), to China and continued to concentrate its efforts on developing the Chinese potato and soft fruit markets. MRS has played a significant role in facilitating the lifting of the export ban on UK seed potatoes to China – a bilateral trade agreement was signed in October 2006 for the export of UK mini-tubers to China.

In October 2006 the SCRI director, Professor Peter Gregory, accompanied Dr Nigel Kerby to China where a further three Memoranda of Understanding (MoU) were



signed with Chinese research organisations in the fields of environmental monitoring, plant and soil interactions and soil resilience.

MRS was invited to join a ministerial Agri-Food Trade Mission to India (March 2006) to stimulate trade in the agri-food sector between India and the UK. India has more irrigated agricultural land than any other country in the world, is the world's second largest producer of potatoes and fruits and a major producer of barley, so offers significant opportunities for SCRI's expertise and products. As a result of the mission, two proposals for funding with the Central Potato Research Institute in Shimla have been submitted and other opportunities for collaboration identified in the areas of plant health, horticulture, micropropagation and barley breeding.

Knowledge transfer and exploitation

- MRS successfully coordinated a bid, on behalf of SCRI, with five other research institutes for £2.5 million of seed funding from the Office of Science and Technology to add to the £6 million Rainbow Seed Fund. MRS and SCRI now have access to seed funds for developing innovative products and services.
- MRS, with Dundee and Abertay Universities and Dundee, Angus and Perth Colleges of Higher Education, established Tayside Knowledge Transfer Partnership with support from Scottish Enterprise Tayside.
- In August 2006, the Dundee SME Innovation Portal was awarded £406k from the Scottish Executive SEEKIT programme as well as £198k ERDF funding. This new initiative brings together MRS (on behalf of SCRI), the two local universities, Scottish Enterprise Tayside and Dundee University Incubator Ltd.
- In December 2006, MRS was awarded £180k from the Scottish Executive SEEKIT programme to enable Interface to extend its remit to include research institutes as well as universities. Interface provides a one-stop shop for companies wishing to access expertise and facilities available in Scotland.

Acknowledgements MRS gratefully acknowledges the support of all SCRI staff, for their significant contribution to the success of the company. MRS would also like

to thank its customers and sponsors for their continued support. We would like to thank the non-executive Directors of MRS who contribute their valuable time without recompense.

Mylnefield Trust and Mylnefield Holdings Ltd

The Mylnefield Trust and Mylnefield Holdings Ltd (MHL) were established in 2000 in order to give the SCRI Group the flexibility it requires to grow. Central to this growth is the creation of a number of spin-out companies, such as Scottish Potato Technology Ltd, in which MHL on behalf of the SCRI Group will hold equity.

The Trust currently has funds of approximately £400K, achieved mainly through donations from MRS Ltd.

The Trust has charitable status and has as its prime objectives:

- to promote research and scientific work in the life, environmental and related sciences, in particular production of agricultural, horticultural and forestry crops, methods of limiting or eradicating pests and diseases, wood sciences and biomathematics, methods of increasing production or growth, improving cultivation and research into possible varieties.
- to promote the dissemination of such research.

To date the Trust has financially supported:

- a Research Incentive Fund;
- an Educational Officer at SCRI;
- a hardship fund for an overseas student;
- various research projects valued at £48,751.

During the financial year 2006-07 The Mylnefield Trust is supporting three projects amounting to £7,552. Also during this financial year The Mylnefield Trust is supporting scientific publications up to a value of £10,000.