Partnerships and Collaboration

SCRI is committed to developing partnerships and collaborative arrangements with other scientists whenever this will enhance our capacity to undertake excellent research. Many formal and informal collaborations exist, but particular attention has been paid during 2006 to developing appropriate UK and international partnerships.

In the UK, we have been working closely with Rothamsted Research, the Institute of Grassland and Environmental Research, and the John Innes Centre to establish the BBSRC cross institute programme on cereal genetics, MONOGRAM. MONOGRAM's main objectives are to provide infrastructure and resources that will enable basic research to make a significant contribution to innovative approaches to crop genetic improvement, and the consortium has appointed Dr Tina Barsby to manage the programme. The core of the programme will lie in the formation of cross-institute teams to ensure the efficient use of all available tools and resources (e.g. germplasm and markers, transcriptomics, proteomics and metabolomics, and bioinformatics) and to plan for new facilities or major pieces of equipment. Simultane-

ously the programme will make a major effort in physically mapping the wheat, barley and lolium genomes in order to provide the tools and information necessary for gene identification and for alignment with available and emerging model plant genome sequences (e.g. rice and Brachypodium). MONOGRAM plans to establish major research themes in areas such as recombination, bioenergy, disease resistance and the identification of traits for cereal grain quality. In similar vein, the SOIL cross institute programme (with Rothamsted Research and the Institute of Grassland and Environmental Research as founding partners) has invited SCRI to participate in elements of its research programmes, especially those focussed on carbon-derived energy and its relation to soil resilience and function, and the interactions of plant roots with soils to create soil structure. SCRI will engage constructively with these research areas and with the experimental platforms that the programme is seeking to establish.

Internationally, SCRI has signed a series of cooperative agreements with institutes in China, and commenced collaborative projects during 2006. MRS Ltd sent some advanced lines and cultivars of potato for trials to the Chinese Academy of Agricultural Sciences, Institute of Vegetables and Flowers, Beijing, and raspberries were sent to Jilin Agricultural University, Changchun, to add to the blackcurrants already undergoing trials. There is considerable commercial interest in China in developing the potato industry into a major consumer industry and MRS Ltd has been working with other agencies to overcome the ban on imports of microtubers and seed potatoes. Soft fruits for processing into juice are also beginning to develop as a product and, again, MRS Ltd is working to ensure that our varieties are considered for exploitation. Several members of the Institute contributed to a major workshop on root/soil interactions in Nanjing in late May and, during a visit to China in mid-October, Peter Gregory signed agreements with both the Chinese Academy of Sciences, Institute of Soil Science, and Nanjing Agricultural University, both in Nanjing. These agreements will allow the collaborative work on soils to continue and there are plans for further exchanges of research students. While in China, Peter also signed an agreement with Jilin Academy of Agricultural Sciences, Gongzhulin which could lead to SCRI's expertise on the monitoring of introduced GM crops being extended to northern China. These three new agreements bring to six the number of formal agreements with Chinese institutions.