THE NORWICH LEGUME GROUP (NORLEG)

There is a long history of legume research, especially with the pea, at the John Innes Institute (JII), the Norwich Laboratory of the Institute of Food Research (IFRN) and in the School of Biological Sciences at the University of East Anglia (UEA). The work of the JII is concerned mainly with the genetics and molecular biology of seed storage products (protein, starch and oil), seed and cellular development and the *Rhizobium*-legume symbiosis; that at IFRN with human and animal nutrition, compositional analysis and variation, the technology of food processing and the functionality of storage products (protein and starch) and that at the UEA with pathology, disease resistance and nitrogen metabolism. This wealth of expertise, involving more than 25 senior scientists, has come together to form the Norwich Legume Group (NORLEG). There are two main reasons for forming NORLEG:

1. **To encourage industrial interest and involvement in the Group's research and development programmes.**
   We intend to form and link an 'industrial club' to NORLEG enabling companies greater access to the Group's work through meetings and advanced publicity. This process of information dissemination will provide a 'shop window' from which it is hoped industrially-sponsored collaborations in particular areas of research will be stimulated. It will also provide a forum through which industry may give advice on the direction and priorities of the research and development programmes. Individual companies will be asked to pay a relatively small fee for 'club' membership which will be used to fund meetings and, perhaps, the industrial funding for large research proposals that demand such an input, e.g. EEC, MAFF, DTI, AFRC.
2. **To increase collaboration and the dissemination of information between the members of NORLEG**
   It is envisaged that regular research seminars as well as less formal meetings will take place within the Group to increase the level of contact between member scientists and hopefully facilitate the expansion of research into new areas. This will provide a 'Group Identity' which can be projected to outside academics and industrialists, and exploited in formulating multi-disciplinary research proposals.

The concept of NORLEG is to create an umbrella for ideas and collaboration on grain legume research - it is not intended to be a closed shop, open only to those who are currently involved in legume research.

Current members of NORLEG are shown on the following list. Local coordinators are indicated by an asterisk.

INSTITUTE OF PLANT SCIENCE RESEARCH
John Innes Institute

Mike Ambrose	-	Germplasm characterisation and maintenance.
Nick Brewin	-	Golgi derived membrane and extracellular glycoproteins in the *Rhizobium* legume symbiosis.
Rod Casey	-	Genetics/developmental regulation of seed protein

genes.

Roy Davies	-	Microinjection techniques and transformation.
Allan Downie	-	Rhizobium genes involved in biosynthesis of plant signal molecules required for nodulation of peas.
Noel Ellis	-	Gene/DNA sequence organisation.
Cliff Hedley*	-	Genetic variation for seed development.
Roger Hull	-	Molecular biology of legume viruses.
Cathie Martin	-	Molecular biology of starch synthesis.
Andy Maule/ George Lomonossoff	-	Molecular characterisation of interaction between plant viruses and leguminous hosts.
Phil Mullineaux	-	Transformation technology and gene expression.
Alison Smith	-	Biochemistry of starch and lipid synthesis.
Trevor Wang	-	Regulation of seed development.

IPSR CAMBRIDGE LABORATORY

Eddie Arthur	-	Biometrical genetics and statistical analysis

INSTITUTE OF FOOD RESEARCH
Norwich Laboratory

Henry Chan	-	Exploitation of the major biopolymer components of legumes.
Ian Colquhoun	-	NMR of legume starches.
Richard Faulks/ Ian Johnson	-	Nutritional characterisation and digestibility of legume seed components.
Roger Fenwick*	-	Anti-nutritional factors, minor seed components
Nigel Lambert*	-	Isolation, characterisation, food functionality and protein-engineering of legume proteins.
Mike Morgan	-	Production, characterisation and utilisation of mono-clonal antibodies to legume proteins.
Vic Morris/ Mervyn Miles	-	Physical characterisation of legume bio-polymers, scanning tunnelling microscope, small angle x-ray scattering.
Steve Ring	-	Legume starch - structure and function.
Robbie Selvendran	-	Physico-chemical characterisation of cell walls, fibre, etc.
Andrew Smith	-	Extrusion of legume fractions.
Gary Williamson	-	Enzymatic biotransformation of legume bio-polymers.

UNIVERSITY OF EAST ANGLIA
School of Biological Sciences

Bryan Lewis*/ Peter Matthews/ Alan Coddington	-	Genetics and molecular biology of pathogenicity and disease resistance.
Andy Johnston	-	Molecular genetics of Rhizobium with regards to noduiation and nitrogen fixation.
Richard Oliver	-	Molecular genetics of plant pathogenic fungi.
Tony Sims	-	Nitrogen assimilation.
John Thain	-	Transport processes at both the cell and whole plant levels of organisation.
John Turner	-	Physiology of bacterial plant pathogens.
David Wildon	-	Electrophysiology

School of Chemical Sciences

Geoff Moore	-	Spectroscopic analysis of macromolecules.

School of Developmental Studies

Robert Willey*/ Stephen Biggs / John Harriss	-	Potential for grain legumes in under-developed regions.

The above information on NORLEG was kindly supplied, at my request, by Dr C.L. Hedley, John Innes Institute, Colney Lane, Norwich NR4 7UH, UK. Dr Hedley would be pleased to handle in the first instance enquiries from companies or individuals interested in making contact with NORLEG.

Editor