THE E.C. PEA GROUP

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The European Community Pea Group has the function of improving communication and collaboration between researchers in government laboratories, universities and industry within the E.C. The interests of the group were enlarged in 1987 to cover all aspects of the pea crop including breeding, agronomy, nitrogen fixation, storage product synthesis, pathology, plus new technology (molecular biology, tissue culture and transformation) and the utilisation of the crop either for animal or human consumption or as a source of industrial products. A data base containing names, addresses and areas of interest has been produced, which at present contains over 300 names covering the whole of the E.C. This information is available to members of the group and has been invaluable during the organisation of meetings and research proposals. The first meeting of the enlarged group took place in Brussels in 1988 and was concerned with the composition of the seed and the uses of peas for animal consumption and industrial products.

The 2nd Meeting of the E.C. Pea Group, Brussels 1989 on - Breeding for Disease Resistance

The second meeting of the Group was a two day workshop held in Brussels. Fifty six members attended the meeting with representatives from 10 E.C. countries; 23 of the participants were from industry. There were 6 sessions in the meeting covering the following topics: the prevalence and importance of diseases in Europe; current disease problems (i) *Fusarium*, (ii) fungi other than *Fusarium*, (iii) bacteria and viruses; resistance sources and assessing resistance; anti-nutritional factors and disease resistance.

A number of general observations were made. It was pointed out that there were a small number of important diseases common to many E.C. countries. Some of these were clearly associated with major losses in yield, e.g. *Mycosphaerella pinodes*, and should be considered priorities in a breeding programme.

Other common problems of significance were:-

(i) *Fusarium* species and associated pathogens causing, collectively, the root rot complex.

(ii) Seed-borne diseases and problems of producing clean seeds. The pathogens involved are *Mycosphaerella pinodes*, PSbMV and *Pseudomonas syringae* pv. *pisi*.

It was suggested that these two topics were very broadly based and required interdisciplinary research groups covering such areas as pathology, breeding, molecular bology and the chemistry of anti-nutritional compounds. Within the meeting it was envisaged that there could be potential areas for collaborative research between different groups of delegates. Delegates were urged, therefore, to think constructively about future developments of the pea crop and the new situations that might appear in the 1990's and which would be of particular concern to plant pathologists and breeders. For example, there would be increasing pressure to reduce reliance on fungicides. Breeding for disease resistance was clearly a way to do this and would become more important. There would also be an overwhelming need to stabilize yields and to improve the quality of the seed and the products of the seed.

One topic was highlighted several times in the meeting; that was the need to standardise host differentials, pathogen isolates and protocols for the

screening of pathogen variation and also for screening germplasm for resistance. It has now been agreed that this will be coordinated at the John Innes Institute and the University of East Anglia in Norwich.

Copies of the Summary of the meeting are available on request from Dr C.L. Hedley, coordinator of E.C. Pea Group.

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