Although gratifying progress has been made, much more work is required before the collection can be considered to be organized and ready for routine use. Considerably more data need to be entered into the computer. When a core collection of the most useful entries has been established, a continuing effort must be made to add to or refine the information already at hand. Stocks must be propagated to maintain their viability and, as each accession is grown for that purpose, genetic and descriptive data not previously noted will be added. A catalog of available Pisum stocks in the collection is not presently available. Such a catalog is needed if we and others are to benefit fully from the resources which have been diligently and systematically developed over nearly three decades.

Since October, 1983, the USDA-ARS has provided critical financial support for organizing and maintaining the Geneva collection, and the task is now underway. The collection has become a part of the National Plant Germplasm System (NPGS), but control and direction remain with the curator (GAM). Our goal is to develop a cross-indexed, multi-referenced "core" collection of stocks consisting of 4000 to 5000 genetically defined lines. To this end, more than thirty computer programs have been written to accomplish various retrieval objectives.

THE PISUM CULTIVAR DATABASE; A RESOURCE

Winfield, P. J. and F. N. Breen Agricultural Scientific Services
Edinburgh, Scotland

The purpose of this note is to advertise the existence of a database of pea cultivars and its associated software.

The Pisum Cultivar Database was created as an aid to cultivar registration work in the United Kingdom. The database primarily holds morphological and physiological data on 1350 cultivars and breeding lines, including all those cultivars on the European (EEC) Common Catalogue, those on the United Kingdom National List, and those entered for registration or the awarding of Plant Breeders' Rights. Registered material and material with Plant Breeders' Rights account for approximately 750 of the 1350 lines. We also hold approximately 1380 seed accessions in our seed reference collection.

The database has approximately 70 morphological and physiological descriptors plus passport information for each cultivar along with further details concerning each seed accession. As far as possible, the morphological characters describe the plant genotype. The descriptions are based mainly on observations made over two years, 1983 and 1984. We plan to grow the entire collection again in 1985 to fill gaps in the database and to improve the quality of the data we have collected.

The database software is written in dBase II, a popular commercial database package which runs on a wide range of micro-computers. We are using a Cromemco System II. The database and its associated software occupy 1.9 MB (megabytes) of disc space. The software allows data to be added, deleted, or interrogated in a variety of ways. Cultivar descriptions can be generated. The software can also be used to identify or classify cultivars in any specified way.

We feel the Pisum Cultivar Database is a resource for anyone interested in peas. It should be particularly useful for breeders interested in predicting registration difficulties or wishing to determine the range of commercially available phenotypes.

We are willing to answer ad-hoc inquiries or provide cultivar descriptions for anyone interested in receiving them, providing such requests do not overtax our resources. Under some circumstances we may not be able to divulge the parentage of cultivars. Two examples of such inquiries might be: "Can you please list all cultivars on the Common Catalogue without parchment (p or v) which flower at node 10 and have a 100-seed-weight between 20-30 grams" or "Please print descriptions for all cultivars owned by company X".

We can also offer subsets of the database along with the software and a user manual. There may be a small charge for this. At the moment, dBase II is required to use the software.

We are aware that the scope and definition of the descriptors could be improved, both for our own purposes and for those requesting information on particular cultivars or lines in our collection. We welcome any comments and suggestions concerning such improvements. We intend, in the near future, to add some disease resistance information to the database.

We are also interested in any cultivars which are about to be registered or deregistered in countries outside Europe and in any unusual genotypes.

For further information please inquire to the following-address:

Niall Green or Peter Winfield
Agricultural Scientific Services
Department of Agriculture and Fisheries for Scotland
East Craigs, Edinburgh EH12 8NJ, Scotland
Telephone (031) 339 2355 Telex: DAFASS 727348

Niall Green is responsible for all cultivar registration matters. Peter Winfield wrote the database software. Both of us are interested in describing and cataloging the variation in peas, particularly with respect to cultivars.