VIII. RESEARCH ACTIVITIES

Name and Address

J. W. Turner
P.O. Box 23
Kingaroy, Q. 4610
AUSTRALIA

J. M. Vincent
UNSW P.O. Box 1
Kensington, N.S.W.
AUSTRALIA 2033

Gaspar Beskow
Departamento de Melhoramento de Soja
CEP - FECOTRIGO
Caixa Postal 10
98.100 - Cruz Alta, RS-BRAZIL

Ake Boklin
Caixa Postal 673
13100-Campinas, S.P.
BRAZIL

Luiz Pedro Bonetti
Departamento de Melhoramento de Soja
CEP - FECOTRIGO
Caixa Postal 10
98.100 - Cruz Alta, RS-BRAZIL

H. L. Gabe
CMNDP - Maringá Office
R. São Bento, 329-8° andar
Caixa Postal 2771
São Paulo, BRAZIL

T. Ashley
Dept. of Biology
University of Calgary
Calgary, Alberta, CANADA

D. A. Littlejohns
Farm Crops Section
College of Agr. Technology
Ridgetown Ontario NOP 2CO
CANADA

Research Interest

Plant-insect interrelationships.

Inheritance of nodulating capacity; editor of Rhizobium Newsletter.

Soybean breeding for increased yield, height, lodging resistance, and response to Al and Mn toxicity; competition among cultivars; variety testing with maturity groups from VI to VIII.

Plant breeding; seeking day-neutral soybean; working with Group VIII soybeans.

Breeding soybeans for southern Brazil with emphasis on maturity groups adapted to the latitudes between 28° - 32° S; disease resistance; good agronomic types; and transferring high protein and oil content into adapted varieties by multiple crosses.

In charge of soybean program for International Plant Breeders in Brazil.

Soybean genetics, chromosome association and crossing over.

Variety evaluation and production studies in soybeans
Teaching field crops production and production of industrial crops, research on soybeans and safflower.

Soybean development at Quilamapu Experimental Station, Chillán, Chile.

Soybean breeding.

Using mostly American soybean varieties, developing mutants with better adaptability to conditions in Hungary.

Quantitative genetics of soybeans.

Low temperature injury and nitrogen nutrition of soybeans.

Genetic variation in soybean germplasm resources.

Soybean protein breeding, especially sulfur-containing amino acids.

Breeding for nematode and virus resistance in soybeans.
Breeding of soybeans for: high and stabilized seed yield, high quality seed, low temperature tolerance, cyst nematode resistance, soybean dwarf virus resistance.

Breeding for high yield and wide adaptation, cold weather tolerance, resistant to cyst nematode, and chemical composition in seed.

Physiological research for cool weather injury of soybeans.

Soybean pathology; soybean disease survey.

Breeding for physiological attributes in soybean.

Soybean experimentation, crops management including irrigation and pest control.

Cultural practices and crop management in soybeans.

Soybean seed technology and soybean physiology.

Breeding of soybean varieties which are adapted to tropical and subtropical environments.

Soybean breeding.
Breeding for high yield potential, photo-period insensitivity, and multiple disease resistance. Special emphasis on soybean rust resistance.

Breeding for ecological attributes in soybean.

Breeding for resistance to Phakopsora pachyrhizi rust.

Soybean varietal improvement; soybean mutation breeding.

Breeding for tropical adaptation.

Studying possibility of raising soybeans in saline soil of Al-Hassa Oasis.

Breeding for yield; for insect and disease resistance, and drought tolerance in soybeans.

Breeding for shattering resistance and heat tolerance in soybeans.

Studying the pathology of soybeans.

Soil-borne plant pathogens and endomycorrhizal fungi on soybean roots.
Physiology and biochemistry of soybean disease resistance and nodulation.

Breeding in natural crossing, mutation, population control.

Development of proprietary varieties with major emphasis on group II through IV. Breeding has been started in the group V through VIII. Breeding for improved yield, seed quality, vigor, and resistance to phytophthora root rot, bacterial pustule, and downy mildew.

Mineral nutrition and nitrogen metabolism of soybeans.

Soybean genetics and biochemistry of seed proteins; ethnobotany of soybeans and related legume crops.

Soybean genetics and improvement, in relation to work in Brazil.

Developing improved methods of weed control in soybeans.

Mutation induction and photorespiration screening in soybeans.

Physiological determinants of soybean seed yield.

Host relationships, disease control and seed quality.
G. Robert Taylor  
Soybean Breeder  
FFR Cooperative  
4112 East State Road 225  
West Lafayette, IN  47906

William H. Eby  
Midwest Oilseeds, Inc.  
Adel, IA  50003

J. M. Dunleavy  
Dept. of Botany and Plant Path.  
Iowa State University  
Ames, IA  50010

D. Green  
Department of Agronomy  
Iowa State University  
Ames, IA  50010

Reid G. Palmer  
USDA-ARS  
Agronomy Department  
Iowa State University  
Ames, IA  50010

Larry P. Pedigo  
Department of Entomology  
Iowa State University  
Ames, IA  50010

T. E. Devine  
Room 236, Bldg. 007, BARC-W  
USDA-ARS  
Beltsville, MD  20705

J. M. Joshi  
Dept. of Soybean Research  
Univ. of Maryland, Eastern Shore  
Princess Anne, MD  21853

Robert C. Leffel  
Room 236, Bldg. 007, BARC-W  
USDA-ARS  
Beltsville, MD  20705

Lowell D. Owens  
Room 236, Bldg. 007, BARC-W  
USDA-ARS  
Beltsville, MD  20705

VARIETAL DEVELOPMENT FOR MEMBER COOPERATIVES. BREEDING FOR YIELD, ADAPTATION AND DISEASE RESISTANCE.

BREEDING FOR YIELD IMPROVEMENT AND DISEASE RESISTANCE.

SOYBEAN HOST-PARASITE INTERACTIONS.

BREEDING FOR PHYSIOLOGICAL ATTRIBUTES IN SOYBEANS.

CYTOGENETICS, PHYSIOLOGICAL GENETICS, QUALITATIVE GENETICS, CHROMOSOME MAPPING, INTERSPECIFIC HYBRIDIZATION.

PEST MANAGEMENT OF SOYBEAN INSECTS; EVALUATION OF COMMERCIAL VARIETIES FOR GREEN CLOVERWORM RESISTANCE.

GENETICS OF SOYBEAN X RHIZOBIUM INTERACTION IN NITROGEN FIXATION.

SCREENING AND BREEDING SOYBEAN VARIETIES FOR INSECT RESISTANCE.

BREEDING, GENETICS, AND CULTURE OF SOYBEANS.

TISSUE CULTURE OF SOYBEAN FOR GENETIC IMPROVEMENT.
Charles Sloger
Room 236, Bldg. 007, BARC-W
USDA-ARS
Beltsville, MD 20705

Physiology of soybean-Rhizobium symbiotic N₂ fixation.

Deane F. Weber
Room 236, Bldg. 007, BARC-W
USDA-ARS
Beltsville, MD 20705

Rhizobium research. Nodulation ecology of Rhizobium japonicum.

K. R. Bromfield
USDA-ARS
Plant Disease Research Lab.
P.O. Box 1209
Frederick, MD 21701

Soybean rust. Soybean pathogens nonendemic to USA. Evaluation of pathogens for damage potential and study of their epidemic behavior.

Joseph G. Wutoh
Vice Chancellor for Academic Affairs
Univ. of Maryland, Eastern Shore
Princess Anne, MD 21853

Breeding for insect resistance in soybean; breeding for physiological (photoperiodic) responses in soybean.

Alfred W. Saettler
Research Plant Pathologist
Bean Diseases Investigations
Michigan State University
East Lansing, MI 48824

Primary research is in area of bean (Phaseolus vulgaris L.) diseases.

Willard A. Dickerson
USDA-ARS, P.O. Box A
Biological Control of Insects
Columbia, MO 65201

Host plant resistance.

J. C. Graham
Agricultural Research
Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, MO 63166

Yield enhancement in soybeans via physiological modifications.

G. L. Eilrich
Agricultural Research
Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, MO 63166

Yield enhancement in soybeans via physiological modifications.

C. A. Porter
Agricultural Research
Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, MO 63166

Yield enhancement in soybeans via physiological modifications.
Soybean breeding and physiology.

Genetics and breeding of soybeans for cool climate.

Somatic crossing over and somatic mosaicism in *Glycine max*: Development of a test system for study of mutagens.

Breeding for nematodes and phytophthora root rot resistance in soybeans.

Growth of soybeans in controlled environments.

Varietal development for member cooperatives. Breeding for yield, adaptation and disease resistance.

Varietal development for member cooperatives. Breeding for yield, adaptation and disease resistance.

Mutagenesis for storage proteins and methionine content.

Mutagenesis-crop improvement, involving soybeans; selection of mutant lines of crop plants capable of producing large quantities of essential amino acids.
Raymond D. Brigham
Texas Agr. Exp. Sta.
Route 3
Lubbock, TX 79401

Breeding and varietal development for dry-land and irrigated production; genetics of disease resistance.

Robert A. Nilan
Program in Genetics
Washington State Univ.
Pullman, WA 99163

Chemical mutagenesis.

Deane C. Arny
Dept. of Plant Pathology
University of Wisconsin-Madison
1630 Linden Drive
Madison, WI 53706

Diseases of soybeans and disease resistance.

Earl T. Gritton
Dept. of Agronomy
University of Wisconsin
Madison, WI 53706

Soybean breeding and genetics.