



# THE BEAN BAG

**A newsletter to promote communication among research scientists  
concerned with the systematics of the Leguminosae/Fabaceae**

Number 39

May 1994



## From the Editors

Joseph H. Kirkbride, Jr. and John H. Wiersema

The *Bean Bag* (BB) is designed to promote communication among research scientists concerned with legume systematics. To achieve this goal the BB is issued in May and November of each year and features six columns: From the Editors, News (meetings, major events, announcements, etc.), Latin American Legume Report, Nodulation and Nitrogen Fixation (new nodulation records), New Readers, Gleanings, and Recent Legume Literature. Data in the Gleanings column are derived from questionnaire sheets which Readers complete and return. If you have news about legume systematics, send it to us for this column. The Recent Legume Literature column contains published research papers of specific interest to BB Readers. Recent is defined as one year old. We rarely will publish a citation that is more than one year old. Specific interest to BB Readers is defined as research papers of interest to a worldwide group of legume systematic botanists. We encourage BB Readers to send us notices, observations, etc.

Diacritical marks can now be placed in the BB. If such marks should be placed in your name, address, publications, etc., please let us know. We are especially interested in correcting our Directory.

Electronic copies of the BB and the *Directory* can be obtained from TAXACOM or through Internet at HUH.HARVARD.EDU. TAXACOM is a free online service for biosystematics and biogeography at the Buffalo Museum of Science, Buffalo, New York, USA. The system operator is Dr. Richard H. Zander. TAXACOM is available 24 hours daily at telephone number 716-896-7581 using 2400/1200/300 bps, 8 data bits, 1 bit stop, and no parity. Outside of the USA use CCITT at 2400 bps, otherwise use Bell protocols. HUH.HARVARD.EDU is a free service on Internet maintained by Dr. James Beach at the Harvard University Herbaria, Cambridge, Massachusetts, USA. Connect to HUH.HARVARD.EDU via FTP using the name FTP and the password FTP, and copies of the BB and the Directory are in the subdirectory /PUB/NEWSLETTERS/BEANBAG.

**Bean Bag address: SB&ML, Rm. 304, Bldg. 011A, BARC-West**

**Beltsville, MD 20705-2350 USA**

## SYMPOSIUM ON ADVANCES IN FABACEAE

Mar del Plata, Argentina  
2-8 October 1994

The Symposium will be part of the VI Congresso Latinoamericano de Botánica to be held in Mar del Plata, Argentina, 2-8 October 1994. The main objectives of the Symposium will be to discuss aspects of our knowledge of legume systematics after the 3<sup>rd</sup> International Legume Conference, including systematics of the higher groups, phytogeography, new lines in research, and databases. The Symposium will provide an opportunity to publicize recent results in legume research and widen contacts among research scientists in Latin America. The symposium will last two and a half hours with 30 minutes for each lecture and 30 minutes for the final discussion period. Coordinators: Biol. Harold C. de Lima and Eng. Agr. Renée H. Fortunato.

### Lectures

1. *The present state of Fabaceae systematics.*  
Speaker: G.P. Lewis, Royal Botanic Gardens, Kew, Great Britain—A synthesis of the present level of knowledge of the Fabaceae after the 3<sup>rd</sup> International Legume Conference. The lecture will focus on advances in systematics of the higher taxonomic levels: order, family, subfamily, tribe, and genus.
2. *Origin, diversity, and phytogeography of Neotropical Fabaceae.*  
Speaker: M. Lavin, Montana State University, USA—A synthesis of our present knowledge of the origin, relationships, and phylogeny of Neotropical Fabaceae, focusing on the centers of diversity and main patterns of geographical distribution.
3. *New lines of research in Fabaceae systematics.*  
Speaker: A. Delgado Salinas, Herbario Nacional, México—An overview of recent advances in the application of new methods and techniques in Fabaceae systematics, such as DNA, ontogeny, phytochemistry, reproductive biology, and cladistic analysis.
4. *Fabaceae databases: Priorities and perspectives.*  
Speaker: F.A. Bisby, Southampton University, Great Britain—Information and services of the databases on the Fabaceae already in existence, focusing on the availability of software and the participation of specialists and institutions in Latin America.

For additional information, contact: Haroldo C. de Lima, Jardim Botânico do Rio de Janeiro, Rua Pacheco Leão, 915, 22460-051 Rio de Janeiro, RJ, Brasil; FAX: 021-512-2077; e-mail: pmajb92@ibase.br.

## International Workshop on ALBIZIA and PARASERIANTHES Species

13-19 November 1994  
Davao City, Philippines

Tropical forests are disappearing at an alarming rate as the demand for tropical forest products increases with world population. To protect these natural forests, the production of fuel, food, fodder, timber, poles, and other tree products must be shifted to plantation and farm forestry systems. *Albizia* and *Paraserianthes* species have great potential to protect the land and provide valuable products through plantation and farm forestry in the tropics. This workshop is being organized to bring together researchers and practitioners to develop production systems using *Albizia* and *Paraserianthes* that will shift pressure away from the world's tropical forests.

The objectives of the workshop are to: 1. increase the knowledge of development workers and scientists concerned with the utilization and management of *Albizia* and *Paraserianthes* species in plantation and farm forestry by exchanging information and documenting current research, 2. increase the use of *Albizia* and *Paraserianthes* species in agroforestry systems by providing extensionists, development workers, and farmers with practical information in a readily usable form, and 3. increase research support for *Albizia* and *Paraserianthes* species by identifying research priorities and initiating collaborative networks.

The workshop will be conducted in English. The schedule will include 40 invited and contributed papers with 15 minutes allocated for each paper presentation followed by five minutes for discussion. There will also be an opportunity for 20 poster presentations. These may be included in

the proceedings if prepared in full. Working groups will meet during the workshop to summarize current research, develop an action plan for future research, and write or edit chapters of a silvacultural field manual on the production and use of *Albizia* and *Paraserianthes* species. There will also be field trips to project sites where these species have been planted.

Workshop results will be presented in: 1. A proceedings volume that will include selected papers and working-group recommendations, 2. a silvaculture field manual on the production and use of *Albizia* and *Paraserianthes* species, 3. two new *NFT Highlights* on *Albizia* species, 4. updated *NFT Highlights* on *Albizia lebeck* and *Paraserianthes falcata*, 5. an action plan for future research and development of *Albizia* and *Paraserianthes* species, and 6. a worldwide network of scientists and development workers concerned with *Albizia* and *Paraserianthes* species.

For further information contact: James M. Roshetko, Nitrogen Fixing Tree Association, 1010 Holomua Road, Paia, Hawaii 96779-9744, USA; Telephone: 808-579-9568; FAX: 808-579-8516.

## The Rupert Barneby Award

Enrique Forero

The New York Botanical Garden is pleased to announce that Dr. André Mauricio de Carvalho of the Centro de Pesquisas do Cacau, Itabuna, Brasil, and Prof. Ricardo Vanni of the Instituto de Botánica del Nordeste, Corrientes, Argentina, are the recipients of the 1993 *Rupert Barneby Award*. Dr. Carvalho will use his award to continue his work on a taxonomic treatment of New World *Dalbergia*. Prof. Vanni will be able to further his studies of *Zornia* sect. *Anisophylla* in South America and *Stylosanthes* for the floras of Argentina and Paraguay.

The New York Botanical Garden invites applications for the 1994 *Rupert Barneby Award*. The award of US\$1,000.00 is to assist researchers planning to come to The New York Botanical Garden to study the rich collection of Leguminosae. Anyone interested in applying for the award should submit their curriculum vitae and a letter describing the project for which the award is sought and how the collections at NYBG will benefit their research. Travel to NYBG should be planned between January 1, 1995 and January 31, 1996. The letter should be addressed to Dr. Enrique Forero, Director, Institute of Systematic Botany, The New York Botanical Garden, Bronx, NY 10458-5126 USA, and received no later than December 2, 1994. Announcement of the recipient will be made by December 16<sup>th</sup>. Anyone interested in making a contribution to *The Rupert Barneby Fund in Legume Systematics*, which supports this award, may send their check, payable to The New York Botanical Garden, to Dr. Forero.

## Smithsonian Institution's Natural History Gopher Server

Warren L. Wagner

The Department of Botany of the National Museum of Natural History, Smithsonian Institution, is pleased to announce the inauguration of a Gopher Server that will provide Internet access to databases and documents that have been created or are now managed by their staff. The following are accessible on the Natural History Gopher Server:

1. *Type Specimen Register, U.S. National Herbarium*: The Type Register of the U.S. National Herbarium provides label and bibliographic data for more than 88,000 types that are included in the 4.5 million-specimen collection. Type specimens are among the most frequently consulted specimens in herbaria since their interpretation helps fix the application of scientific names. The register includes not only label data, but also indicates whether or not bibliographical information associated with a type specimen was verified by our staff.

2. *ASPT Newsletter*: The *ASPT Newsletter* (1987-present), published quarterly by the American Society of Plant Taxonomists, and currently being edited at the National Museum of Natural History, focuses on matter of interest to the plant taxonomy community. It includes news items and information on awards and funding; job opportunities; internships and fellowships; symposia and meetings; flora projects; and new books, serials, and newsletters. Recent issues of the *Newsletter* may be browsed or

searched. A search will return relevant sections from all of the issues posted on the Gopher Server. The *Newsletter* will become an important electronic archive of contemporary activity in the field of botany.

3. *Biological Conservation Newsletter and Bibliography*: The *Biological Conservation Newsletter* (1981-present), a monthly publication of the Department of Botany, serves the biodiversity research and conservation communities. It has articles on conservation research and news items. It also provides an important compilation of new publications, fellowship and grant opportunities, job announcements, educational materials, and meetings. An extensive bibliography of relevant current literature is a useful service provided in each issue. Recent issues of the *Newsletter* will be available, along with the cumulative bibliography of more than 6,400 references.

4. *Historical Collections in the U.S. National Herbarium*: The Index to Historical Collections is a list of the major collections acquired by the U.S. National Herbarium through 1965. When known, information is provided on the size of the collection and its place of origin. This index, with more than 1,600 records, is the most comprehensive account of the collectors represented in the U.S. National Herbarium. The information can be searched by the name of the collector or a geographical locality. It is a valuable reference for systematists seeking to locate specimens and for historians documenting botanical collecting expeditions.

5. *Plants of the Guianas*: The *Checklist of the Plants of the Guianas (Guyana, Surinam, French Guiana)* (1992), produced by the Smithsonian's Biological Diversity of the Guianas Program in collaboration with ORSTOM, Cayenne, French Guiana, accounts for all of the vascular plants, bryophytes, and Characeae (algae) known to occur in these three countries of northeastern South America. Accepted names, distribution by country, limited synonymy, and references are among the information included. The original publication has been reproduced on the Gopher Server.

The addresses of the Natural History Gopher Server are nmnhgoph.si.edu or 160.111.64.84, port 70.

For further information contact: Dr. Ellen Farr, Department of Botany, NHB 166, Smithsonian Institution, Washington, D.C. 20560 USA; telephone: 202-357-1882; FAX: 202-786-2563; e-mail: mnhbo001@si.edu Internet.

## Botanic Garden Irkutsk State University

Victor Ya. Kuzevanov

The Botanic Garden of Irkutsk State University (BG-ISU), created in 1941, today occupies 27.08 hectares within the city of Irkutsk, 70 kilometers west of Lake Baikal. It is the only site of plant introduction in Eastern Siberia, and is categorized by law as a nature preserve within the city of Irkutsk.

The principle tasks of BG-ISU are plant introduction; the training of university students, school children, and the general population; and the improvement of ecological conditions. BG-ISU is working to save the genetically diverse flora of Eastern Siberia by adding to its collection of living plants and by studying their biology. With the existing collection, an assortment of plants better adapted to local and other climatic and ecological conditions, BG-ISU endeavors to increase the amount of green area in the city and to improve the environment. BG-ISU carries out educational activities related to nature preservation and botanical knowledge. BG-ISU is the only botanic garden in Central Siberia included in the International Nomenclature of Botanic Gardens, since 1953, and is a member of the Network of Botanic Gardens of Russia.

BG-ISU staff maintains and studies a living collection of 1,300 plant species and varieties from various regions of the world. BG-ISU is a center of training and practical study for students of the Biological and Soil, Geological, Geographical, and Chemical Faculties of Irkutsk State University at which staff members give lectures and carry out research. In the past five years, students at BG-ISU have completed one doctorate and six master's and eight bachelor's degrees. Courses and workshops are held regularly for student pharmacologists of the Irkutsk State Medical Institute, students of the Irkutsk State Pedagogical Institute, summer students of the Irkutsk Pharmacological College, and for school teachers. School groups also make frequent field trips to the Botanic Garden. In the past five years, staff members have published 14 articles and seven conference abstracts in Russian publications. Once

every two years, BG-ISU issues a seed list, "Delectus of the Irkutsk Botanic Garden," as part of its international seed exchange program.

Currently, BG-ISU is organized into four sections:

1. Dendrology. Occupies about eight hectares. Maintains and studies approximately 300 species of woody plants and bushes, including both local Siberian flora and flora of the former Soviet Union and world.
2. Wild Flora and Germplasm Preservation. Occupies about one hectare on which over 300 species are maintained. Consists of three collections: systematic, medicinal, and rare and endangered plants of Eastern Siberia.
3. Flowering and Ornamental Plants. Over 500 species are maintained in a field and two greenhouses (1,000 square meters and 200 square meters). Tropical and subtropical cultures are included.
4. Horticultural plants. Occupies about two hectares. Over 200 species and varieties of fruiting and other cultivated plants.

At the moment, BG-ISU is registered as a branch of the university, but it expects to become a partly independent entity within the next few years. The staff includes 29 members, including four Ph.Ds.: three administrative workers, 12 biologists, three senior and two junior lab workers, four gardeners, and four guards. The University provides only for BG-ISU operating expenses and staff salaries, averaging US\$40 per month. Financial support for BG-ISU restoration and beautification was discontinued over five years ago. The equipment of BG-ISU does not meet modern standards or current needs, as it lacks the following: 1) Machinery for soil treatment, 2) vehicles for transportation, 3) elementary equipment for botanical, physiological, and soil research, and 4) a sewage system. The physical infrastructure of BG-ISU is in poor condition. The perimeter fence remains broken in several spots because the university is not able to provide funds for its repair. Nearby residents trespass on the grounds of BG-ISU constantly, leading to frequent destruction and theft of valuable plants. The one guard per 24 hour period allowed by the university's budget cannot patrol 27 hectares adequately. Especially destructive are teenagers who build fires in the midst of a relic pine forest situated on the BG-ISU grounds. Four years ago, almost 1.5 hectares of the forest were designated for cutting by the administration of the city of Irkutsk to build a highway and homes. At least 0.25 hectares have been cut and the completion of one building has seriously damaged the biocenosis of the forest. Both a hot water pumping station and a power station for city trolley buses now run through BG-ISU. Lawns and natural fields were harmed by construction machinery. Building materials and trash litter the forest as a result of the construction. A temporary order of stay exists for the forested area not yet cut. Beginning in 1981, almost 60 percent of the valuable tropical and subtropical plants died every winter due to accidents resulting from a dangerously constructed heating system. This system has been repaired as one of the first acts of the new management of BG-ISU, financed independently from the university.

Unfortunately, the break-up of the Soviet Union has forced fundamental changes in the system supporting botanical, ecological, and biotechnological research. Shortages have come, and we have to look for any collaboration/support from international sources.

At present BG-ISU is looking for collaboration in:

- 1) GENE BANK PROJECT for rare and endemic Siberian plant conservation (seed banking, collections, etc),
- 2) construction of a COMPUTER DATA BASE (Paradox 3.5, scanning of color pictures and maps) of plant genetic resources in Siberia as a part of the Gene Bank Project,
- 3) botanical expeditions around Baikal Lake to save endangered plants,
- 4) clonal propagation (fruit trees, etc) and genetic transformation of plants,
- 5) seed exchange and/or seed production, and
- 6) publishing of attractive brochures and photo-cards on Siberian flowering plants.

Dr. Victor Ya. KUZEVANOV, Director, The Botanic Garden, Irkutsk State University, Koltsov Street, 93, P.O.Box 1457, Irkutsk, 664039, Russia; Phone: 7-(3952)-435836; Fax: 7-095- 4202106 (International) or 7-3952-332238 (Local); Telex: 231511 PTB SU  
Attention IGU KUZEVANOV; Email: vic@bogard.irkutsk.su.

## Nodulation and Nitrogen Fixation

Legume Nodulation Reports not in Allen and Allen (1981)

Taxon	Status <sup>1</sup>	Nodule <sup>2</sup> Shape	Source <sup>3</sup>
<i>Astragalus adsurgens</i> Pallas	+		1
<i>Chamaecrista nomame</i> (Sieb.) H. Ohashi	+		1
<i>Derris trifoliata</i> Lour.	+		1

<sup>1</sup>Status: +, root nodules reported as present; -, root nodules reported as absent; ±, the nodulation report conflicts with Allen and Allen (1981).

<sup>2</sup>Nodule shape: Ae, aeschynomoid; As, astragaloid (now referred to as caesalpinoid by Corby); Cr, crotalaroid; CrB, branched crotalaroid; CrS, simple crotalaroid; De, desmodioid; Gl, globose; Lu, lupinoid; Mu, mucunoid.

<sup>3</sup>Source:

1. Oyaizu, H., S. Matsumoto, K. Minamisawa, and T. Gamou. 1993. Distribution of rhizobia in leguminous plants surveyed by phylogenetic identifications. *J. Gen. Appl. Microbiol.* 39: 339-354.

## Gleanings

ABDULINA (new Reader) did a dissertation on "Species of the genus *Oxytropis* DC. of North Tian-Schan" in 1984. He is now investigating the Fabaceae of Kazakhstan, preparing a database and keys to genera and species and determining the distribution of taxa in Kazakhstan. He needs new publications on the Fabaceae, and offers in exchange herbarium specimens of Fabaceae from Kazakhstan.

ADAMS (new Reader) has interests in the legumes of Europe and tribe Hedysareae.

AGULLO, see BRIZUELA.

ALBUQUERQUE has begun working on leguminous weeds and can supply information on Amazonian legumes, chiefly weeds and medicinal plants.

BEREZUTSK (new Reader) is working on two projects: floristic revision of the legumes in the Saratov Region for ILDIS and the anthropotolerance of Fabaceae, including resistance to direct anthropogenic impact, tolerance to secondary habitats, and increasing anthropogenic trends in the region. He needs publications dealing with his areas of study, and he offers in exchange legume herbarium specimens from the Saratov Region of southeastern European Russia.

BEYRA-MATOS has the article "Distribución y ecología de las especies cubanas del genero *Crotalaria* (Leguminosae—Faboideae)" at the printer and two other manuscripts, "Arquitectura foliar de los taxa cubanos de la tribu Millettieae" and "Características epidérmico-foliares de los taxa cubanos de la tribu Millettieae," in the editorial process. She has completed her taxonomic study of tribe Millettieae and prepared a manuscript for the fascicle of the new *Flora de la República de Cuba*. From January to April of 1994, she carried out studies on the foliar architecture and leaf anatomy of the Cuban taxa of tribe Robinieae after which she prepared the manuscript of the Robineae for the new *Flora de la República de Cuba*. In May, 1994, she will begin her studies of tribe Desmodieae in Cuba.

BLAISE (new Reader) is studying tannin and cyanine production in the *Lotus corniculatus* group. He needs seeds of the *Lotus corniculatus* group (*L. borbasii*, *L. creticus*, *L. halophilus*, *L. japonicus*, *L. krylovii*, *L. peregrinus*, *L. stenodon*, and *L. strictus*) and other species, *L. angustissimus*, *L. conimbricensis*, *L. cytisoides*, *L. drepanocarpus*, *L. edulis*, *L. ornithopoides*, *L. parviflorus*, and *L.*

*subbiflorus*, and he offers in exchange seeds of *L. alpinus* from the French Alps and *L. corniculatus*, *L. tenuis*, and *L. uliginosus* from France.

BOCHKIN is preparing a treatment of Fabaceae for the project "Flora of Lower Volga" and working on adventitious and ruderal Fabaceae in the former USSR. He needs new publications on the Fabaceae and adventitious and ruderal plants, and offers in exchange herbarium specimens of Fabaceae (especially *Astragalus*) and other families from middle Asia, Siberia, the Russian Far East, Krymea, Caucasus, European Russia, and especially from the lower Volga.

BRIZUELA is working on the floral biology of *Vigna adenantha*, with Verónica Di Stilio, HOC, AGULLO, and PALACIOS, and on the taxonomy of *Prosopis*.

COLES (new Reader) is working on the systematics of the genus *Cicer*.

COMBES needs seeds of *Lathyrus sativus* or other *Lathyrus* spp. resistant to bruchids, and offers in exchange seeds of *L. cicera*, *L. heterophyllus* (many accessions), *L. latifolius*, *L. sativus*, and *L. sylvestris*.

CORBY has a paper in press on "Growth and decay of the rhizobial nodules of the Leguminosae."

COWAN begun preparation of the Mimosoideae, excluding *Acacia*, for the *Flora of Australia*. He received a one-year grant from the government of Australia in support of this work.

Di Stilio, Verónica, see BRIZUELA.

DREWES has a paper in press for *Candollea*, *Notulae ad Florum Paraquariense* entitled "Notas en Phaseolinae II: Nueva combinación en el género *Macroptilium*" with PALACIOS, and is finishing her revision of *Macroptilium* from Argentina.

DUBOVİK (new Reader) is studying the taxonomy and floristics of legumes from the Ukraine, especially the Crimea, and Caucasus. She needs recent publications on the systematics of *Astragalus*, *Caragana*, *Chamaecytisus*, *Coronilla*, *Genista*, etc. and herbarium specimens of *Genista* and other legumes from Bulgaria, Greece, and Turkey, and offers in exchange publications on and herbarium specimens of legumes from the Ukraine.

ESPINOSA-HERNANDEZ (new Reader) is working on interspecific competition and niche differentiation in relation to phosphorus and nitrogen in *Avena sativa* and *Lupinus arboreus*.

GAMA-LOPEZ has started working on the systematics of *Stylosanthes*, and needs all information referring to *Stylosanthes*.

GUNN has completed data collection for 269 genera of Faboideae for the third and final volume of his study on the fruits and seeds of the Fabaceae. He is now being assisted by Anna Weitzman who will collect data for tribes Millettieae, Phaseoleae, and Sophoreae. KIRKBRIDE will edit volume three and also prepare the introduction and keys for the volume. After publication of the third volume, the DELTA databases for all three volumes will be merged and published electronically. Following completion of the faboid volume, GUNN will be spending most of his time building two fruit-seed databases: one emphasizing his collections of tropical drift fruits and seeds, and the other on fruit and seed characters at the family level. After August 1994, his address will be 120 White Squirrel Lane, Brevard, North Carolina 28712 USA. Also see KIRKBRIDE.

HANELT and D. Mbewe of Lusaka, Zambia, are studying the protein types of *Phaseolus vulgaris* land-races from Georgia (Transcaucasus).

HOC, see BRIZUELA.

ISELY has completed a draft manuscript of US *Lupinus* and is working on treatments of all US genera, "a shade over 100," updating, editing, revising, correcting, and nomenclature.

James, Euan, is conducting research into nitrogen fixation and flooding tolerance in the genus *Neptunia*. He understands that there is a flood-tolerant species, *N. lutea*, in the southeastern US, and he needs seeds of the species. Biological Sciences, University of Dundee, Dundee, DD1 4HN, Scotland, Great Britain.

KAGALO (new Reader) is working on a floristic revision of the legumes of West Ukraine for ILDIS and on the database FABA for legume species of West Ukraine. She offers in exchange legume specimens from the Carpathian Mountains of West Ukraine.

KIRKBRIDE is working on a book chapter summarizing the taxonomic history and infrageneric-supraspecific classification of *Lotus* and the morphology of the cultivated species of *Lotus*, and is collaborating with WIERSEMA and GUNN on the description of a new African genus of tribe Swartzieae. Also see GUNN.

KRAMINA needs seeds and herbarium materials of species in the *Lotus corniculatus* group and offers the same from European Russia.

KRISHNAKUMARI (new Reader) is studying the effects of hormones on legumes, especially *Vigna mungo*.

KRUGER is now working on the evaluation, selection, breeding, and commercial development of *Cajanus cajan*, *Vigna unguiculata*, and *Voandzeia subterranea* and on the description and characterization of *Macroptilium atropurpureum* collections. He needs material of *Voandzeia subterranea*, and offers in exchange African grasses and introduced tropical and subtropical legumes.

KURLOVICH is developing Vavilov's theoretical ideas on classification, evolution, geography, and history of cultivated plants. He needs seeds of *Lupinus albus*, *L. angustifolius*, *L. luteus*, and *L. mutabilis* for breeding studies, and offers in exchange his new publications and seeds of *Lupinus*.

KUZEVANOV (new Reader) is director of the Botanic Garden of Irkutsk State University (BG-ISU); see his article in this issue of *The Bean Bag*.

LEE (new Reader) is studying the rhizobial cell and working on the arbuscular mycorrhizal fungi of legumes, especially wild Korean legumes.

Mbewe, D., see HANELT.

MENDONÇA is studying the phenology of arboreal legume species at the Biological Station of Caratinga, Minas Gerais, Brazil. He needs publications on tropical legume phenology, and offers herbarium specimens in exchange.

MILTON is investigating animals associated with *Acacia erioloba* in the southwest arid zone of Africa.

MOSJIDIS is now working on the quantitative genetics and isozymes of *Trifolium repens*, red clover.

PALACIOS, see BRIZUELA and DREWES.

PAVLOVA (new Reader) is working on a floristic treatment of Fabaceae in the Russian Far East for ILDIS.

PEDLEY is now doing the following: 1) revising *Desmodium* and related genera (*Aphyllodium*, *Dendrolobium*, *Phyllodium*, and *Tadehagi*) for Australia; 2) preparing a conspectus of *Chamaecrista* in Australia; and, 3) revising *Alysicarpus* in Australia.

PIZARRO (new Reader) is an agronomist who has worked in the Tropical Forage Program of the Centro Internacional de Agricultura Tropical (CIAT) since 1981. In 1989 a joint program was established between CIAT and EMBRAPA for research in the Brazilian Cerrado vegetation. His research is focused on the collection and preliminary evaluation of tropical grasses and legumes. The most important legume genera are: *Arachis*, *Calopogonium*, *Centrosema*, and *Stylosanthes*.

PODOLNAYA (new Reader) is studying the anatomy and morphology of pods and seeds of selected species of *Medicago* and *Trigonella*. She offers in exchange seeds of *Medicago* and *Trigonella* from Caucasus and Crimea.

POTOKINA is working on the reproductive biology of *Vicia*. She needs seeds of perennial species of *Vicia*, excluding *V. cracca*, and seeds and herbarium specimens of *Astragalus* from both the New and Old Worlds. She offers in exchange seeds of *Phaseolus* and *Vigna* from Uzbekistan, local varieties, and seeds of *Astragalus* from Central Asia.

PUNITHAVATHY (new Reader) is studying the effects of herbicides on legumes.

RAMIREZ-AVILES (new Reader) is studying the management and effects of environmental conditions on flowering, seed set, and seed maturation in *Aeschynomene*, *Arachis*, *Centrosema*, and *Leucaena*. He needs seeds of *Arachis* spp., and offers information on the agronomy of *Canavalia ensiformis* seed production.

REPJEV (new Reader) is working on the germplasm of *Vicia*. He needs *Vicia* seeds for breeding, and offers in exchange legume publications and seeds of *Vicia*.

REYNOSO is studying the taxonomy and palynology of *Calliandra* in Jalisco, Mexico, and preparing a preliminary check list of the legumes of Jalisco. He needs publications and type photographs, and offers in exchange herbarium specimens, seeds, and fruits.

RICO-ARCE needs herbarium specimens of Neotropical *Acacia* and Ingeae (except *Inga*), dry leaflets for DNA analysis, and wood samples of *Acacia*, and offers herbarium specimens of Mexican Leguminosae in exchange.

RODRIGUEZ-CARRASQUERO is now working on the legumes of the Venezuelan Andes, especially the trees. He offers in exchange legume specimens of Venezuela.

ROSKOV and SYTIN in collaboration with YAKOVLEV are continuing their work on the database "North Eurasian Legumes," legumes of the former USSR (FSU) and Mongolia. The database now includes 2,246 species and infraspecific taxa forming a complete checklist for the area. More than 40 legume specialists from Russia, the Ukraine, Belorussia, Estonia, Latvia, and Turkmenistan are assisting in regional floristic reviews of the database. Distributions of species and infraspecific taxa in the database will be derived from the literature, the largest herbaria of the FSU, and little-known collections of many universities, pedagogical institutes, and nature reserves.

Ruijun, Li, is interested in the genomic differentiation and speciation of *Vicia*, and needs seeds of *Vicia americana* and other species of South American *Vicia* species. Department of Biology, Harbin Normal University, Harbin 150080, P.R. of China

SAGALAEV (new Reader) is treating the genus *Astragalus* for the "Flora of Lower Volga."

SANDERSON (new Reader) is working on the molecular phylogenetics of *Astragalus* and Galegeae.

SCHMIDT (new Reader) needs information about amphicarpic legumes or other plants which have similar mechanisms, and offers information on the amphicarpic legume *Centrosema rotundifolium*.

SEFEROVA has started working on the spermoderm anatomy of *Cicer* seeds and the systematics of the genus *Cicer*. She needs seeds of wild *Cicer* species, and offers in exchange seeds of *Cicer acantophyllum* Pamir.

SOKOLOFF needs seeds and herbarium material of *Anthyllis* and related genera and new publications on *Anthyllis* and Loteae taxonomy. He offers in exchange seeds and herbarium specimens of *Anthyllis* from Russia and herbarium specimens of vascular plants from the Murmansk Region and Kurelia, Russia.

SYTIN, see ROSKOV.

SZABO is now working on: 1) electronic database for germplasm, including legumes; 2) DINIFIX—electronic database of dinitrogen fixation bibliography which is available from the network of the Hungarian Academy of Sciences; and, 3) intraspecific variability in *Trifolium pannonicum*. He needs material of *Trifolium* sect. *Stenostemum* (*T. caucasicum*, *T. pannonicum*, etc.), and offers different morphotypes of *T. pannonicum*.

ULLE is doing a floristic revision of the legumes in SKO herbarium (Institute of Biology, Syktyvkar) for ILDIS, see ROSKOV. He needs publications on the genus *Lotus*, and offers in exchange new herbarium specimens of legumes from Komi and Arkhangelsk Region (northeastern European Russia).

VEASEY (new Reader) is a research agronomist at the Instituto de Zootecnia in Nova Odessa, São Paulo, Brazil, and works principally with genetics and forage plant breeding. Recently more emphasis has been placed on the evaluation of nitrogen fixing trees and shrubs at her institute. Consequently she is now starting a Ph.D. dissertation on the genetic variability of *Sesbania*.

Vincent, Michael A., has focused his research on the taxonomy of New World clovers (*Trifolium*, Leguminosae). He is working on: 1) distributions and status of the seven eastern United States native *Trifolium* (*T. bejariense*, *T. calcaricum*, *T. carolinianum*, *T. polymorphum* (*T. amphianthum*), *T. reflexum*, *T. stoloniferum*, and *T. virginicum*); 2) a monograph of *Trifolium* sect. *Involucrarium*; 3) species complex of *Trifolium*, called by him *T. amabile* complex, which extends from southwestern US through Central America into South America; and, 4) treatments of *Trifolium* in Mexico and for the Flora of Chile. He needs specimens of the genus *Trifolium*, especially from the New World, and seeds of any *Trifolium* species for his seed bank and for DNA analyses and for allozyme and morphological studies. He will exchange specimens for new collections or receive specimens as gifts for determinations. Herbarium MU, Department of Botany, Miami University, Oxford, Ohio 45046 USA; telephone: 513-529-2755; FAX: 513-529-4243; e-mail: vincentm@mu-support.acs.muohio.edu Internet.

Weitzman, Anna, see GUNN.

WEDER is working on the primary structure of a trypsin-chymotrypsin inhibitor from *Lens culinaris*.

WIERSEMA, see KIRKBRIDE.

WONG-LEON is now investigating the morphometry of *Phaseolus*.

YAKOVLEV, see ROSKOV.

ZALLOCCI is working on the chemotaxonomy of *Prosopidastrum* and *Prosopis* and the chemical analysis of pollen and nectar in Phaseoleae subtribe Phaseolinae and *Prosopis*.

ZYMNITSKAYA (new Reader) is working on the comparative embryology of *Trifolium*. She needs information and publications on the morphology and anatomy of seeds, fruits, and flowers and on chromosome numbers of legumes, especially *Trifolium*, and offers information and publications on the reproductive biology of *T. pannonicum*, *T. pratense*, and *T. trichocephalum*.

## RECENT LEGUME LITERATURE

**Eds. Note:** Author names in all capital letters are BB Readers. Their full names and addresses are listed in November 1992 BB Directory and supplements. Correspondence about their articles should be sent directly to them.

AGULLO, BRIZUELA, HOC, V. Di Stilio, PALACIOS, GENISE, and P. Hazeldine. 1993. Relación unidad de polinización-visitantes florales en *Vigna luteola* (Leguminosae, Phaseoleae). Bol. Soc. Argent. Bot. 29(3-4).

ALBUQUERQUE. 1993. Identificação e germinação de sementes Amazônicas. Ministério da Educação e do Desporto Faculdade de Ciências Agrárias do Pará. Serviço de Documentação e Informação. Includes 20 forest trees and 30 herbaceous weeds, among these 21 legumes.

Anderson, J.L. and J.M. Porter. 1994. *Astragalus tortipes* (Fabaceae), a new species from desert badlands in southwestern Colorado and its phylogenetic relationships within *Astragalus*. Syst. Bot. 19(1): 116-125.

Ansari, A.A. 1993. *Crotalaria venusta* (Leguminosae: Papilionoideae), a new species from Burma. Kew Bull. 48(4): 755-756.

ARAMBARRI. 1994. Illustrated catalogue of *Lotus* L. seeds (Leguminosae). Pp. 27-29 in BEUSELINCK and C.A. Roberts, eds., Proceedings of the First International *Lotus* Symposium, 22-24 March 1994.

ARCO-AGUILAR. 1993. New combinations in the genus *Teline* Medicus. Typification of *Cytisus pallidus* Poiret. Itinera Geobotanica 7: 519-523.

Aswal, B.S., A.K. Goel, and B.N. Mehrotra. 1990. *Oxytropis shivai* (Fabaceae) - A new species from Ladakh (India). Indian J. Forest. 13(3): 257-259.

Bandyopadgtat, B. and S. Sen. 1993. Varietal constancy in the amount of DNA in the roots of *Dolichos biflorus* Linn. (Horsegram). XV Int. Bot. Congr. Abstracts 510. (abstract)

BANDYOPADHYAY and B.D. Sharma. 1993. Lectotypification of *Bauhinia glauca* ssp. *tenuiflora* (Leguminosae). J. Bombay Nat. Hist. Soc. 89(3): 393, 395.

BANDYOPADHYAY and THOTHATHRI. 1993. The identity of *Lasiobema horsfieldii* Miq. (Leguminosae: Caesalpinioideae). J. Econ. Tax. Bot. 17(3): 693-696.

BARNEBY. 1993. Increments to the genus *Mimosa* (Mimosaceae) from South America. Brittonia 45(4): 328-332.

BARNEBY. 1994. A new species of *Chamaecrista* Moench (Caesalpinaceae) from interior Bahia, Brazil. Brittonia 46(1): 69-71.

BARNEBY and GRIMES. 1994. A new species of *Inga* (Fabaceae, Mimosoideae, Ingeae) from Atlantic forest in Bahia, Brazil. *Brittonia* 46(1): 66-68.

BLAISE, D. Cartier, and J. Reynaud. 1991. Evolution and differentiation of *Lotus corniculatus*/*Lotus alpinus* populations from the French southwestern Alps. 1. Morphology and cyanogenic variations. *Evolutionary Trends in Plants* 5(2): 137-148.

Boggan, J., V. Funk, C. Kelloff, M. Hoff, C. Cremers, and C. Feuillet. 1992. Checklist of the plants of the Guianas (Guyana, Surinam, French Guiana). Biological Diversity of the Guianas Program, Smithsonian Institution, Washington, D.C. 20560 U.S.A. Fabaceae on pp. 142-150, with several genera contributed or reviewed by specialists, such as: Aeschynomene, Chaetocalyx, and Machaerium (RUDD); Canavalia (AYMARD); Clitoria (FANTZ); Crotalaria (WINDLER); Dioclea (MAXWELL); Lonchocarpus (SOUSA); and Macroptilium, Phaseolus, and Vigna (DELGADO). Available from authors at no charge while supplies last. Also available on National Museum of Natural History, Smithsonian Institution's gopher server on the Internet. See preceding article on Smithsonian Institution's Natural History Gopher.

Brako, L. and ZARUCCHI. 1993. Catálogo de las Angiospermas y Gimnospermas del Perú. *Monogr. Syst. Bot. Missouri Bot. Gard.* 45: 1-1328. Includes information on each taxon on whether endemic, introduced or cultivated, habit, habitat, altitude range, literature references, voucher collections, and synonyms.

BRIZUELA, HOC, V. Di Stilio, AGULLO, PALACIOS, P. Hazeldine, and GENISE. 1993. Biología floral de *Macroptilium bracteatum* (Leguminosae, Phaseoleae). *Darwiniana* 32(1-4): 41-57.

BROCKWELL, D.M. Hebb, and KELMAN. 1994. Symbiotaxonomy of *Lotus* species and symbiotically related plants and of their root-nodule bacteria. Pp. 30-38 in BEUSELINCK and C.A. Roberts, eds., *Proceedings of the First International Lotus Symposium*, 22-24 March 1994.

Bullitta, S. and M.D. Hayward. 1993. Study of taxonomic relationships within the genus *Trifolium* by means of RAPDs markers. XV Int. Bot. Congr. Abstracts 201. (abstract)

Camargo-Ricalde, S. and GREETHER. 1993. Distribution and utilization of the "tepescohuite", *Mimosa tenuiflora* (Leguminosae) in Mexico. XV Int. Bot. Congr. Abstracts 253. (abstract)

CAMERON and PRAKASH. 1993. Ovule characters of systematic value in Australian papilionoid legumes. XV Int. Bot. Congr. Abstracts 96. (abstract)

CAMERON and PRAKASH. 1993. Crystals in the anther tapetum and the microspores of Australian papilionoid legumes. XV Int. Bot. Congr. Abstracts 358. (abstract)

Campos, L.P., J.V. Raelson, and GRANT. 1993. Genomic relationships among *Lotus* species based on random amplified polymorphic DNA (RAPD). XV Int. Bot. Congr. Abstracts 200. (abstract)

Cardenas, L. 1993. *Inga cardozana* (Leguminosae-Mimosoideae): A new species from Venezuela. *Ernstia* 3(1): 15-18. In Spanish.

Cardenas, L., H. Rodriguez, and G. De Martino. 1993. Species of *Inga* Mill. (Leguminosae-Mimosoideae) from the Henri Pittier National Park states of Aragua and Carabobo, Venezuela. *Ernstia* 3(1): 27-53. In Spanish.

Cavallini, A., L. Natali, G. Cionini, and D. Gennai. 1993. Nuclear DNA variability within *Pisum sativum* (Leguminosae): Nucleotypic effects on plant growth. *Heredity* 70(5): 561-565.

Chamberlain, J.R. and N.W. Galwey. 1993. Methods of identifying genetic diversity in *Gliricidia* species for biomass production. *Experimental Agric.* 29(1): 87-96. With Spanish summary.

- Cremonini, R., S. Funari, I. Galasso, and D. Pignone. 1993. Cytology of *Vicia* species. II. Banding patterns and chromatin organization in *Vicia atropurpurea* Desf. *Heredity* 70(5): 628-633.
- DEBOUCK, O. Toro, O.M. Paredes, W.C. Johnson, and P. Gepts. 1993. Genetic diversity and ecological distribution of *Phaseolus vulgaris* (Fabaceae) in northwestern South America. *Econ. Bot.* 47(4): 408-423. With Spanish summary.
- Djavanshir, K. 1993. A new species of *Prosopis* (Mimosaceae) from Iran: *Prosopis persica* Djavanshir *sp. nova*. *Iranian J. Nat. Resources* 46: 47-49. In Persian with English summary.
- Du Puy, D.J., LABAT, and SCHRIRE. 1993. The separation of two previously confused species in the *Indigofera spicata* complex (Leguminosae: Papilionoideae). *Kew Bull.* 48(4): 727-733.
- DUBOVİK. 1991. De genera *Genista* L. (Fabaceae) in flora Tauriae et Caucasi. II. *Novosti Sist. Vyssh. Rast.* 28: 95-102. In Russian.
- DUBOVİK. 1990. De genera *Genista* L. (Fabaceae) in flora Tauriae et Caucasi. I. *Novosti Sist. Vyssh. Rast.* 27: 82-88. In Russian.
- DUBOVİK and T.I. Abramova. 1991. *Astragalus tanaiticus* C. Koch - the rare endemic species in the flora of the Lower Don. Pp. 38-40 in P. Rostov-Don, The flora of Lower Don and North Caucasus: Structure, dynamics, protection, problems of the use. In Russian.
- DUBOVİK and D.S. Dsibov. 1990. The geographical analysis of the *Astragalus* L. (Fabaceae) species in the Crimea-Novorossiisk Province and their florogenetical connections. *Bot. Zhurn. (Leningrad)* 75(2): 170-180. In Russian.
- Ehrlen, J. 1993. Ultimate functions of non-fruiting flowers in *Lathyrus vernus*. *Okios* 68(1): 45-52.
- Endo, Y. 1993. Morphological studies of the styles and stigmas of *Vicia* (Leguminosae). XV Int. Bot. Congr. Abstracts 338. (abstract)
- FANTZ. 1993. Revision of cultivated *Centrosema* and *Clitoria* in the United States. *Hortscience* 28(6): 674-676.
- FANTZ. 1993. Notes on *Clitoria* (Leguminosae) in southeast Asia. *Novon* 3(4): 352-355. New varieties in *C. hanceana* and *C. macrophylla* described.
- Fay, M.F. and P.J. Dale. 1993. Condensed tannins in *Trifolium* species and their significance for taxonomy and plant breeding. *Genet. Resources Crop Evol.* 40(1): 7-13.
- Fernandez Prieto, J.A., M.L. Vera, M.J. Alvarez Martinez, T.E. Diaz, M.A. Fernandez Casado, M.C. Fernandez-Carvajal, M.I. Gutierrez Villarias, and H.S. Nava. 1993. Chromosome numbers and geographical distribution of *Ulex europaeus* subsp. *europaeus* (Leguminosae). *Bot. J. Linn. Sic.* 113(1): 35-39.
- FRANCISCO-ORTEGA, H.J. Newbury, and B.V. Ford-Lloyd. 1993. Numerical analyses of RADP data highlight the origin of cultivated tagasaste (*Chamaecytisus proliferus* ssp. *palmensis*) in the Canary Islands. *Theoret. Appl. Genet.* 87(1-2): 264-270. Supports hypothesis that tagasaste originated on La Palma.
- Frazer, J.E. and R.J. Marquis. 1994. Environmental contribution to floral trait variation in *Chamaecrista fasciculata* (Fabaceae: Caesalpinioideae). *Amer. J. Bot.* 81(2): 206-215.

- Gasson, P. 1993. Wood anatomy of Swartzieae and related caesalpinoid and papilionoid legumes. XV Int. Bot. Congr. Abstracts 88. (abstract)
- GRANT. 1994. Interspecific hybridization and amphiploidy of *Lotus* as it relates to phylogeny and evolution. Pp. 16-19 in BEUSELINCK and C.A. Roberts, eds., Proceedings of the First International *Lotus* Symposium, 22-24 March 1994.
- Greene, S.L. and J.R.-McFerson. 1994. Conservation of the *Lotus* genetic resources: Status of the U.S. collection. Pp. 39-42 in BEUSELINCK and C.A. Roberts, eds., Proceedings of the First International *Lotus* Symposium, 22-24 March 1994.
- Greinwald, R., P. Bachmann, L. Witte, and F.C. Czygan. 1992. The alkaloids of *Hesperolaburnum platycarpum* (Fabaceae: Genisteae): Chemotaxonomic implications. Biochem. Syst. Ecol. 20(6): 583-588. Suggest close affinity to Cytisophyllum.
- GRETHER and S. Camargo-Ricalde. 1993. *Mimosa bahamensis* (Leguminosae) in the peninsula of Yucatan, Mexico. XV Int. Bot. Congr. Abstracts 232. (abstract)
- Gross, C.L. 1993. The reproductive ecology of *Canavalia rosea* (Fabaceae) on Anak Krakatau, Indonesia. Austral. J. Bot. 41(4/5): 591-599.
- HEGNAUER and R.J. Grayer-Barkmeijer. 1993. Relevance of seed polysaccharides and flavonoids for the classification of the Leguminosae: A chemotaxonomic approach. Phytochemistry 34(1): 3-16.
- Hernandez, G., T. Bisseling, F. de Bruijn, P. Gresshoff, T. Huguet, G. Kiss, E. Kondorosi, J. Stougaard, D. Verma, and F. De Bruijn. 1993. Regeneration and transformation in legumes. New Horizons in Nitrogen Fixation. Proc. 9th Intl. Congr. on Nitrogen Fixation, Cancun, Mexico, 6-12 December 1992. Curr. Pl. Sci. Biotechn. Agric. vol. 17.
- HOC, V. Di Stilio, AGULLO, BRIZUELA, PALACIOS, P. Hazeldine, and GENISE. 1993. Biología floral de *Vigna longiflora* (Leguminosae, Phaseoleae). Darwiniana 32(1-4): 27-39.
- Huang, T.C. and H. Ohashi. 1993. Leguminosae. Pp. 160-395 in Editorial Committee of the Flora of Taiwan, Flora of Taiwan, 2nd ed., Volume 3. Department of Botany, National Taiwan University. About 60 genera and 170 species treated.
- Husain, T. 1993. International Legume Data-base and Information Service (ILDIS) Phase I-Data for subfamily Mimosoideae. XV Int. Bot. Congr. Abstracts 226. (abstract)
- Iinuma, M., M. Ohyama, J. Yokoyama, and T. Tanaka. 1993. Chemosystematics of the genus *Sophora*. XV Int. Bot. Congr. Abstracts 399. (abstract)
- Jay, M., J. Reynaud, D. Cartier, and BLAISE. 1994. Diversification strategies of *Lotus corniculatus* s.l. in the light of chemical markers. Pp. 20-24 in BEUSELINCK and C.A. Roberts, eds., Proceedings of the First International *Lotus* Symposium, 22-24 March 1994.
- Kajita, T. and H. Ohashi. 1993. Chloroplast DNA variation in *Desmodium* subgenus *Podocarpium* (Leguminosae): Interspecific phylogeny and intraspecific variations. XV Int. Bot. Congr. Abstracts 204. (abstract)
- Kajiyama, K., Y. Hiraga, K. Takahashi, S. Hirata, S. Kobayashi, U. Sankawa, and T. Kinoshita. 1993. Flavonoids and isoflavonoids of chemotaxonomic significance from *Glycyrrhiza pallidiflora* (Leguminosae). Biochem. Syst. Ecol. 21(8): 785-793.

- Kamble, S.Y. 1992. Some new records from Maharashtra and Goa. *J. Econ. Tax. Bot.* 16(3): 557-558. New record for *Vicia hirsuta*.
- KIRKBRIDE. 1994. Taxonomic circumscription of the genus *Lotus* Linnaeus (Fabaceae, Loteae), its tribal position, and its species. Pp. 11-15 in BEUSELINCK and C.A. Roberts, eds., Proceedings of the First International *Lotus* Symposium, 22-24 March 1994.
- KIRKBRIDE and GUNN. 1993. Phylogenetic implications of seeds and fruits in Caesalpinioideae and Mimosoideae (Fabaceae). XV Int. Bot. Congr. Abstracts 96. (abstract)
- Klochko, N.A. and KURLOVICH. 1990. The new deserving form of *Lupinus angustifolius* L. f. *confertus* Klochko et Kurl. Res. Bull. Vavilov Inst. Pl. Industr. 206: 82-83. In Russian with English summary.
- KRAMINA. 1994. *Lotus corniculatus* L. complex in the European Russia. Pp. 25-26 in BEUSELINCK and C.A. Roberts, eds., Proceedings of the First International *Lotus* Symposium, 22-24 March 1994.
- KUSNETZOVA. 1993. Study of *Astragalus inflorescences* by the method of logic opportunities. *Flora* 188: 425-429.
- Ladizinsky, G. and S. Abbo. 1993. Cryptic speciation in *Lens culinaris*. *Genet. Resources Crop Evol.* 40(1): 1-5.
- Ladizinsky, G., S. Abbo, and A. Demissie. 1992. Genetic characterization of *Lens ervoides* from Ethiopia. *Genet. Resources Crop Evol.* 39(1): 51-54.
- LARSEN, K. 1993. Note on the nomenclature of Cassieae (Leguminosae-Caesalpinioideae) in Malaysia. *Nord. J. Bot.* 13(4): 403-404. New combinations in *Cassia*, *Chamaecrista*, and *Senna*.
- LARSEN, K. and S.S. LARSEN. 1993. New taxa and nomenclatural combinations in Malesian *Bauhinia* (Leguminosae-Caesalpinioideae). *Nord. J. Bot.* 13(6): 657-665. 14 new taxa and 21 new combinations, most at varietal rank.
- LEE and K.H. Lee. 1992. Identifications and taxonomic groupings of rhizobial species isolated from leguminous plants in Korea. *Korean J. Pl. Pathol.* 8: 195-203.
- Lehmann, P. and E. Kozubek. 1993. Genomic organization and nucleotide sequence of the repetitive DNA from *Vicia sativa* L. *Genet. Polon.* 34(3): 185-195. With Polish summary.
- LERSTEN and J.D. Curtis. 1993. Subepidermal idioblasts in leaflets of *Caesalpinia pulcherrima* and *Parkinsonia aculeata* (Leguminosae-Caesalpinioideae). *Bull. Torrey Bot. Club* 120(3): 319-326.
- LEWIS. 1994. Two new taxa of *Aeschynomene* (Leguminosae: Papilionoideae) from Brazil. *Kew Bull.* 49(1): 93-97.
- LEWIS. 1994. A new species of *Parapiptadenia* (Leguminosae: Mimosoideae) from Brazil. *Kew Bull.* 49(1): 99-101.
- LEWIS and J.L. Contreras. 1994. Studies in neotropical *Caesalpinia* (Leguminosae-Caesalpinioideae). A new species from Mexico. *Kew Bull.* 49(1): 103-105.
- LI, Ruijun, and Xiangjun Liu. 1993. Studies on chromosomes in *Vicia* sect. *Americanae* in China. *Amer. J. Bot.* 80(6): 161. (abstract)

- Lioi, L. and K. Hammer. 1993. A note on the variation of phaseolin among common bean landraces collected in Eastern Asia. *Genet. Resources Crop Evol.* 40(1): 55-57.
- Ludwig, W. 1993. *Vicia dalmatica*: A new adventive plant? *Hess Floristische Briefe* 41(3): 39-41.
- Lynch, A.J.J. 1993. Conservation biology and management of 16 rare or threatened Fabaceae species in Tasmania. Australian National Parks and Wildlife Service. Department of Environment and Land Management. Endangered Species Program Project No. 4.
- Léonard, J. 1993. Note on the genera *Schotia* Jacq. and *Leonardoxa* Aubrev. and on the new genus *Normandi dendron* J. Léonard (African Caesalpiniaceae). *Bull. Jard. Bot. Natl. Belgique* 62(1-4): 433-451. In French.
- Mackinder, B. 1993. *Erythrina* L. in the Flora Zambesiaca area. *Kirkia* 14(1): 114-124.
- Maekawa, M., S. Ha, and T. Sunagawa. 1993. Variation and inheritance of contrasting pattern through honey bee's eyes in forage legumes. XV Int. Bot. Congr. Abstracts 242. (abstract)
- Magallón-Puebla, S. and S.R.S. Cevallos-Ferriz. 1993. Fossil mimosoid legume pods from the Upper Cenozoic of Puebla, Mexico. XV Int. Bot. Congr. Abstracts 240. (abstract)
- Magallón-Puebla, S. and S.R.S. Cevallos-Ferriz. 1993. Fossil legume pods from the Upper Cenozoic Pie de Vaca formation, Puebla, Mexico. XV Int. Bot. Congr. Abstracts 240. (abstract)
- Martins, P.S. and G. Marcon. 1993. Breeding system of the colonizing species *Stylosanthes humilis* H.B.K. (Leguminosae). XV Int. Bot. Congr. Abstracts 277. (abstract)
- Martínez-Bernal, A. and GREYER. 1993. Pollen morphology of the genus *Mimosa* in Mexico and its systematic implications. XV Int. Bot. Congr. Abstracts 29. (abstract)
- Matthew, K.M. 1993. Precursory notes for a flora of the Palni Hills, South India. II. *Kew Bull.* 48(4): 757-765. Includes new combination in *Chamaecrista*.
- Mavi, G.S. 1992. A critical review on the distribution and host-range of pea blue butterfly, *Lampides boeticus* (Linn.). *J. Insect Sci.* 5(2): 115-119. Feeds on Leguminosae, Cruciferae, and Polygonaceae.
- MAXTED. 1993. A phenetic analysis of *Vicia* section *Atossa* series *Truncatulae* (Leguminosae: Viciae). *Kew Bull.* 48(4): 739-753.
- Mehlman, D.W. 1993. Seed size and seed packaging variation in *Baptisia lanceolata* (Fabaceae). *Amer. J. Bot.* 80(7): 735-742.
- MISSET and C. Fontenelle. 1993. Antigenic relations among species of the genus *Ulex* L. (Faboideae-Genisteae) determined by crossed immunoelectrophoresis and immunoblotting. *Evol. Trends Pl.* 7(1): 23-28.
- Mithen, R. 1993. A new species of *Sphenostylis* (Leguminosae-Papilionoideae) from Zimbabwe. *Kirkia* 14(1): 19-23.
- Mithen, R. and H. Kibblewhite. 1993. Taxonomy and ecology of *Vigna unguiculata* (Leguminosae-Papilionoideae) in South-Central Africa. *Kirkia* 14(1): 100-113.
- MURRAY, A.V. Nandini, and K.R.W. Hammett. 1993. *Lathyrus* karyotypes: A wealth of diversity masked by superficial similarities. XV Int. Bot. Congr. Abstracts 167. (abstract)

- Nemoto, T. and H. Ohashi. 1993. Comparative anatomy of lomentis in tribe Desmodieae (Leguminosae). XV Int. Bot. Congr. Abstracts 232. (abstract)
- Nesom, G.L. 1993. A new species of *Desmodium* (Fabaceae) from northeastern Mexico, with comments on the genus in Nuevo Leon. *Phytologia* 75(5): 385-390.
- Nillson, L.A., E. Rabakonandrianina, B. Pettersson, and R. Gruenmeier. 1993. Lemur pollination in the Malagasy rainforest liana *Strongylodon craveniae* (Leguminosae). *Evolutionary Trends in Plants* 7(2): 49-56.
- Normand, D. 1993. On the anatomical structure of wood of the species of *Leonardoxa* Aubrév. (African Caesalpiniaceae). *Bull. Jard. Bot. Natl. Belgique* 62(1-4): 429-432. In French.
- Oballa, P.O. and P.A.S. Oling'otie. 1994. Chromosome numbers in two African *Acacia* species. *Kew Bull.* 49(1): 107-113.
- Oyaizu, H., S. Matsumoto, K. Minamisawa, and T. Gamou. 1993. Distribution of rhizobia in leguminous plants surveyed by phylogenetic identification. *J. General Appl. Microbiol.* 39(4): 339-354.
- Pacyna, A. 1993. Floristic notes from Pogorze Wielickie. II. *Fragm. Florist. Geobot.* 38(1): 271-276. Includes new record for *Vicia cassubica* in Polish western Carpathians.
- Padulosi, S. and N.Q. Ng. 1993. A useful and unexploited herb, *Vigna marina* (Leguminosae-Papilionoideae) and the taxonomic revision of its genetic diversity. *Bull. Jard. Bot. Natl. Belgique* 62(1-4): 119-126.
- Panella, L. and P. Gepts. 1992. Genetic relationships within *Vigna unguiculata* (L.) Walp. based on isozyme analyses. *Genet. Resources Crop Evol.* 39(2): 71-88.
- Panella, L., J. Kami, and P. Gepts. 1993. Vignin diversity in wild and cultivated taxa of *Vigna unguiculata* (L.) Walp. (Fabaceae). *Econ. Bot.* 47(4): 371-386. With French summary.
- PASQUET. 1993. Two new subspecies of *Vigna unguiculata* (L.) Walp. (Leguminosae: Papilionoideae). *Kew Bull.* 48(4): 805-806.
- PASQUET. 1993. Intraspecific classification of wild *Vigna unguiculata* (L.) Walp. (Fabaceae) from morphological data. *Bull. Jard. Bot. Natl. Belgique* 62(1-4): 127-173. In French.
- PAVLOVA. 1993. Fabaceae of the Russian Far East. XV Int. Bot. Congr. Abstracts 256. (abstract)
- Perrino, P., G. Laghetti, P.L. Spagnoletti Zeuli, and L.M. Monti. 1993. Diversification of cowpea in the Mediterranean and other centres of cultivation. *Genet. Resources Crop Evol.* 40(3): 121-132.
- Polignano, G.B., P. Ugenti, and G. Scippa. 1993. The pattern of genetic diversity in faba bean collections from Ethiopia and Afghanistan. *Genet. Resources Crop Evol.* 40(2): 71-75.
- Polozhii, A.V. and E.E. Timoshok. 1992. Ontogeny and population structure of *Oxytropis kossinskyi* (Fabaceae) in southeastern Altai. *Bot. Zhurn. (St. Petersburg)* 77(12): 105-108. In Russian.
- PONCY. 1991. Studies on the flora of the Guianas, no. 63. Two new *Inga* species, and taxonomic and nomenclatural notes on three other species. *Bull. Mus. natl. Hist. nat. ser. 4, sect. B, Adansonia* 13(3-4): 147-154. In French with English summary.

- Prive-Gill, C., B. Azanza, J. Morales, G.A. Gill, and M. Lemoine. 1993. Early miocene silicified wood and associated fauna from the Cuenca Province, Spain--*Genistoxylon dorycnioides* n. sp. (Leguminosae-Papilionaceae). *Rev. Palaeobot. Palynol.* 78(3/4): 395-402.
- Przywara, L. and R. Konieczny. 1993. An attempt to cross *Trifolium repens* with *T. xerocephalum* (Fabaceae). *Fragm. Florist. Geobot.* 38(1): 69-74. A viable hybrid could not be produced by any method used.
- Qian, Z.G. 1992. New variation and records of the genus *Astragalus* from Yunnan. *Acta Bot. Yunnan.* 14(4): 378, 384. 2 new varieties described. In Chinese and Latin.
- Ranabahu, P. and J.B. Harborne. 1993. The flavonoids of the genus *Lathyrus* and a comparison of flavonoid patterns within the tribe Viciae. *Biochem. Syst. Ecol.* 21(6-7): 716-722. Each genus of tribe has a distinctive flavonoid profile.
- Rasulova, M.R. and SHARIPOVA. 1992. New species of the genus *Cicer* L. from Tajikistan. *Izv. Akad. Nauk Respubl. Tadjik. Otd. Biol. Nauk* 0(1): 51-52. In Russian.
- Reynaud, J. and M. Jay. 1994. Phytochemical approach to *Lotus corniculatus* s.l. diversification. Pp. 24 in BEUSELINCK and C.A. Roberts, eds., *Proceedings of the First International Lotus Symposium*, 22-24 March 1994.
- Reynaud, J., M. Jay, and BLAISE. 1991. Evolution and differentiation of *Lotus corniculatus* s.l. (Fabaceae) from the southern French Alps (Massif du Ventoux and Montagne de Lure). *Canad. J. Bot.* 69: 2286-2290.
- Reynaud, J., M. Jay, BLAISE, and D. Cartier. 1993. Chemical markers, witness of the diversification within *Lotus corniculatus* L. populations. XV Int. Bot. Congr. Abstracts 515. (abstract)
- Sanchez-Yelamo, M.D., M.E. Tortosa, F. Perez-Garcia, and A. Cuquerella. 1993. Variability among seed coats in some species of the genus *Onobrychis* Miller (Leguminosae-Fabaceae). *Phytomorphology* 42(3-4): 257-265. 10 species studied; 3 patterns of spermoderm surface morphology: tuberculate, reticulate, and rugulate.
- SANDERSON and DOYLE. 1993. Phylogenetic relationships in North American *Astragalus* (Fabaceae) based on chloroplast DNA restriction site variation. *Syst. Bot.* 18(3): 395-408.
- Schmit, V., P. du Jardin, BAUDOIN, and DEBOUCK. 1993. Use of chloroplast DNA polymorphisms for the phylogenetic study of seven *Phaseolus* taxa including *P. vulgaris* and *P. coccineus*. *Theoret. Appl. Genet.* 87: 506-516.
- SCHULTZE-KRAFT, H.D. Tuan, N.P. Ha, S. Pattanavibul, and P. Sornprasitti. 1993. Collecting tropical forage legume germplasm in Vietnam and Thailand. *FAO-IBPGR Pl. Genet. Res. Newsl.* 91/92: 50-52.
- Sedgley, M. and J. Harbard. 1993. Pollen storage and breeding system in relation to controlled pollination of four species of *Acacia* (Leguminosae: Mimosoideae). *Austral. J. Bot.* 41(4/5): 601-609.
- Serradilla, J.M., T. De Mora, and M.T. Moreno. 1993. Geographic dispersion and varietal diversity in *Vicia faba* L. *Genet. Resources Crop Evol.* 40(3): 143-151.
- Shanmughasundaram, K. and D. Subramanian. 1993. Cytogenetical investigations in 5 interspecific hybrids of *Vigna* species. XV Int. Bot. Congr. Abstracts 511. (abstract)
- Shevera, M.V. 1993. Palynomorphological peculiarities of the species of genus *Chamaecytisus* Link (Fabaceae) of Ukrainian flora. *Ukrains'k. Bot. Zhurn.* 50(1): 123-127. In Ukrainian.

- Sivinski, R.C. 1993. *Oxytropis deflexa* (Pall.) DC. var. *deflexa* (Fabaceae). *Madroño* 40(4): 274.
- Sorensson, C.T. and J.L. Brewbaker. 1994. Interspecific compatibility among 15 *Leucaena* species (Leguminosae: Mimosoideae) via artificial hybridizations. *Amer. J. Bot.* 81(2): 240-247.
- SPRENT and CORDEIRO. 1992. Nodulated legume trees in the cerrado: Taxonomic distribution, infection process, and nodule morphology. *Ciencia e Cultura* 44(5): 336-338. With Portuguese summary.
- STEINER. 1994. *Lotus* germplasm utilization: Integrating genetic diversity, species relationships, and ecological distributions. Pp. 39-42 in BEUSELINCK and C.A. Roberts, eds., *Proceedings of the First International Lotus Symposium*, 22-24 March 1994.
- Strittmatter, C.D., M.L. Wagner, M. Kade, and A.A. Gurni. 1992. Identification of *Lotus tenuis* Waldst. et Kit. flavonoids. *Biochem. Syst. Ecol.* 20(7): 685-687. Studied at four different developmental stages in life cycle.
- SUSO, M.T. Moreno, and CUBERO-SALMERON. 1993. Variation among Spanish faba beans cultivars: Taxonomic and evolutionary implications. *Genet. Resources Crop Evol.* 40(2): 105-111.
- Suzuki, H., Y. Koike, K. Saito, and I. Murakoshi. 1993. A novel tigloyltransferase for lupin alkaloids: Purification, characterization, and distribution in *Lupinus* species. XV Int. Bot. Congr. Abstracts 397. (abstract)
- SYTIN. 1992. On polymorphism, discontinuity, and species criteria in *Astragalus* (Fabaceae). Pp. 123-132 in *Biodiversity and ways of investigation and conservation*. St. Petersburg.
- SYTIN. 1990. Nota de specio *Astragalus viciifolius* DC. *Novosti Sist. Vyssh. Rast.* 27: 88-92.
- Thompson, J. 1993. Revision of the genus *Swainsona* (Fabaceae). *Telopea* 5(3): 427-582. 85 species recognized.
- TINDALE and L.A. Craven. 1993. *Glycine pindanica* (Fabaceae, Phaseolae), a new species from West Kimberley, Western Australia. *Austral. Syst. Bot.* 6(4): 371-376.
- Tineo, B., P. Rodriguez, and A. Castillo. 1992. Morphoanatomy of the vegetative organs of *Machaerium robiniaefolium* (DC.) Vogel (Leguminosae-Papilionoideae-Dalbergieae). *Mem. Soc. Cienc. Nat. La Salle* 52(137): 37-51.
- TUCKER. 1993. Stamen development in legumes, with emphasis on porate stamens of Cassieae. XV Int. Bot. Congr. Abstracts 94. (abstract)
- TUCKER. 1994. Floral ontogeny in Sophoreae (Leguminosae-Papilionoideae): I. *Sophora sensu lato* (*Sophora* group). *Amer. J. Bot.* 81(3): 368-380.
- TURNER. 1993. A new species of *Lotus* sect. *Hosackia* (Fabaceae) from Nuevo Leon, Mexico. *Phytologia* 75(5): 409-410.
- Tyagi, B.S and P.K. Gupta. 1991. Intraspecific nuclear DNA variation in pigeonpea (*Cajanus cajan* (L.) Millsp.) and pea (*Pisum sativum*). *Indian J. Genet. Pl. Breed.* 51(3): 357-362.
- Vaillancourt, R.E., N.F. Weeden, BRUNEAU, and DOYLE. 1993. Chloroplast DNA phylogeny of Old World *Vigna* (Leguminosae). *Syst. Bot.* 18(4): 642-651.

- VAN WYK, R. Greinwald, and L. Witte. 1993. Alkaloids of the genera *Dicraeopetalum*, *Platycelyphium*, and *Sakoanala*. *Biochem. Syst. Ecol.* 21(6-7): 711-714. Presence of alpha-pyridone alkaloids in *Dicraeopetalum* suggests that it may be better placed in the *Sophora* group, not the *Cadia* group, of the Sophoreae.
- VAN WYK, R. Greinwald, and L. Witte. 1993. The taxonomic significance of alkaloids in the South American genus *Anarthrophyllum*. *Biochem. Syst. Ecol.* 21(6-7): 705-709. Presence of alpha-pyridone alkaloids, chromosome number, and certain morphological features suggest affinities with *Argyrolobium* group (Crotalarieae) and *Lupinus* (Genisteeae). Better placed near *Lupinus* in Genisteeae.
- Velazquez, D. and G. Orsini-Velazquez. 1993. Catalogue and description of genera of the subfamily Papilionoideae (Leguminosae) in Venezuela: II. Tribes Cicereae, Crotalarieae, and Dalbergieae. *Ernstia* 3(2): 71-92. 15 genera enumerated and described. In Spanish.
- VERDCOURT. 1993. An account of the genus *Mucuna* Adans. for the Flora Zambesiaca area. *Kirkia* 14(1): 1-11.
- VILELA. 1993. Anatomía foliar de *Prosopis* (Leguminosae-Mimosoideae): Estrategias adaptativas a diferentes ambientes en *Prosopis nigra*. *Darwiniana* 32(1-4): 99-107.
- Vithanage, V. and S. Chakraborty. 1992. Identification of selected cultivars and accessions of *Stylosanthes* by isozyme analysis. *Tropical Grasslands* 26(3): 156-164. With Spanish summary.
- Wu, M.J. and T.C. Huang. 1993. A palynological study of Taiwan indigo (*Indigofera* L.). XV Int. Bot. Congr. Abstracts 28. (abstract)
- Yamazaki, M., A. Sato, K. Saito, and I. Murakoshi. 1993. Restriction fragment length polymorphisms associated with the production pattern of alkaloids in *Lupinus* species. XV Int. Bot. Congr. Abstracts 399. (abstract)
- Yoshiki, Y., Y. Kim, S. Shoji, K. Hoshikawa, and K. Okubo. 1993. Classification of leguminous seeds by DDMP saponin composition and the chemical structures of new DDMP saponins. XV Int. Bot. Congr. Abstracts 399. (abstract)
- ZALLOCCHI, A.B. Pomilio, and PALACIOS. 1993. Chemotaxonomical study of Phaseolinae. II. Chromatography of flavonoids from Argentinian species of the genus *Vigna*. *Darwiniana* 32(1-4): 139-158. In Spanish.
- Zarre, S. 1992. A new species of the genus *Astragalus* L. sect. *Halicacabus* Bunge (Leguminosae) from Iran. *Iranian J. of Bot.* 5(2): 95-99. With Arabic summary.
- ZHANG. 1993. Some additional taxa of *Bauhinia* (Leguminosae) from China. *Nord. J. Bot.* 13(4): 399-402. 1 new species and 1 new variety.

## New Readers and Changes for the November 1992 Directory

The complete *Bean Bag Directory* now appears on a three-year schedule. The last full *Directory* appeared in November 1992, and the next complete *Directory* will be published in November 1995. Use this supplement in conjunction with the November 1992 *Directory*.

Dr. Saule A. Abdulina  
Institute for Botany  
Nat. Acad. Sci. Republic Kazakhstan  
Bogenbai-batry Street, 103  
Almat 480100, Kazakhstan  
Voice telephone: 3272-61-81-91/3172-62-73-69  
FAX telephone: 3272-61-53-14  
Electronic mail: adm@geol.academ.alma-ata.su  
[Internet]  
FABACEAE (KAZAKHSTAN)  
OXYTROPIS (NORTH TIAN-SCHAN)

Acquisitions Division  
University of Nebraska-Lincoln  
University Libraries  
P.O. Box 880410  
Lincoln, Nebraska 68588-0410 USA  
FABACEAE (LIBRARY)

Dr. Bryan Adams  
ILDIS Coordinating Centre  
Biology Department  
Univeristy of Southampton  
Southampton SO9 3TU, Great Britain  
Voice telephone: 0703-592-444  
FAX telephone: 0703-594-269  
Electronic mail: bradams@southampton.ac.uk  
[Internet]  
FABACEAE (EUROPE)  
HEDYSAREAE

Dr. Norma O. Aguilar  
UPLB Museum of Natural History  
Univ. of the Philippines at Los Baños  
College, Laguna 4031, Philippines  
Voice telephone: 001-63-94-2893/2864/50304  
FAX telephone: 63-2-817-0598  
FABACEAE (MOUNT MAKLING,  
PHILIPPINES)  
FABACEAE (NODULATION, PHILIPPINES)  
FABACEAE (NODULE ANATOMY)  
FABACEAE (TAXONOMY, PHILIPPINES)  
FABACEAE (SEED IDENTIFICATION,  
PHILIPPINES)  
FABOIDEAE (NOMENCLATURE,  
PHILIPPINES)

Lic. María Aurora Agulló  
Lab. Sist. Plantas Vasculares  
Dpto. Ccias. Biol., Fac.Ccias.Ex.Nat.  
C.P. 1428  
Buenos Aires, Argentina  
Voice telephone: 07-541-748-8154  
FAX telephone: 54-1-331-2589  
Electronic mail: agullo@s.p.vasc.edu.ar [Internet]  
CASSIA  
PHASEOLUS  
PROSOPIS  
PROSOPIS (FLORAL BIOLOGY)  
VIGNA

Dr. Robert Allkin  
Herbarium, Royal Botanic Gardens  
Kew, Richmond  
Surrey TW9 3AB, Great Britain  
Voice telephone: 44-81-332-5715  
FAX telephone: 44-81-332-5278  
Electronic mail: r.allkin@rbgkew.org.uk  
[Internet]  
FABACEAE (COMPUTER DATA BANKS)  
FABACEAE (COMPUTER IDENTIFICATION)  
FABACEAE (ILDIS)

Dra. Maria Aparecida Oliveira Alves  
Universidade Federal do Ceará  
Departamento de Biologia  
BL-906, Campus do PICI  
60.000.000 Fortaleza, Ceará, Brazil  
FABACEAE (CYTOLOGY)  
FABACEAE (GENETICS)

Dr. Marcelino J. Del Arco-Aguilar  
Dpto. Biología Vegetal (Botánica)  
Universidad de la Laguna  
38071 La Laguna, Tenerife  
Islas Canarias, Spain  
Voice telephone: 922-603608/922-603606  
Extension: 522  
FAX telephone: 922-630095  
FABACEAE (ECOLOGY)  
FABACEAE (TAXONOMY)

Dr. James Aronson  
 CEFE, CNRS  
 B.P. 5051  
 34033 Montpellier, France  
 Voice telephone: 33-67-61-32-96  
 FAX telephone: 33-67-41-21-38  
 ACACIA CAVEN  
 ACACIA CAVEN (NUTRIENT CYCLING)  
 ACACIA SER. GUMMIFERAE (SOUTH  
 AMERICA)  
 FABACEAE (NITROGEN-FIXING, SOUTH  
 AMERICA)

Dr. Aidyn Musa ogly Askerov  
 Botanical Institute  
 Patamdartscoe Shosse, 40  
 Baku 370602, GSP-602, Azerbaidzhan Republic  
 Voice telephone: 39-82-58  
 ASTRAGALUS (AZERBAIDZHAN)  
 FABACEAE (AZERBAIDZHAN, CHECKLIST)

Conny Bruun Asmussen  
 Department of Botany & Plant Pathology  
 Cordley 2082  
 Oregon State University  
 Corvallis, Oregon 97331-2902 USA  
 Voice telephone: 503-737-2445  
 FAX telephone: 503-737-3573  
 Electronic mail: [asmussec.@bcc.orst.edu](mailto:asmussec.@bcc.orst.edu)  
 [Internet]  
 LATHYRUS (PHYLOGENY)

Subir Bandyopadhyay  
 Botanical Survey of India  
 23F, Fern Road  
 Calcutta 700019, India  
 BAUHINIA (INDIA)

Dr. Donald J. Banks  
 P.O. Box 2286  
 Stillwater, Oklahoma 74076 USA  
 Voice telephone: 405-372-8674  
 ARACHIS

Jean-Pierre Baudoin  
 U.E.R. Phytotechnie Régions InterTrop.  
 Faculté des Sciences Agronomiques  
 5030 Gembloux, Belgium  
 Voice telephone: 32-81-622-112  
 FAX telephone: 32-81-614-544  
 PHASEOLUS

Dr. Mikael Berezutsk  
 Department of Ecology and Plant Syst.  
 State University

Astrakhanskaya Street, 83  
 Saratov 410071, Russia  
 Voice telephone: 7-845-51-9222  
 FABACEAE (AFFECT OF ANTHROGENIC  
 IMPACT)  
 FABACEAE (SARATOV REGION, RUSSIA)

Dr. Peter Bernhardt  
 Department of Biology  
 St. Louis University  
 St. Louis, Missouri 63103 USA  
 ACACIA  
 MIMOSOIDEAE (POLLINATION)

Ing. César Augusto Bianco  
 Universidad Nacional de Río Cuarto  
 Facultad de Agron. Veter., Bot. Sist.  
 Estafeta Postal N° 9  
 5800 Río Cuarto, Córdoba, Argentina  
 Voice telephone: 0586-33858  
 FAX telephone: 0586-45980  
 CAESALPINIOIDEAE (CORDOBA,  
 ARGENTINA)

Biblioteca  
 CENARGEN/EMBRAPA  
 C.P. 10.2372  
 70.770 Brasília, DF, Brazil  
 FABACEAE (LIBRARY)

Biblioteca  
 Instituto de Botánica del Nordeste  
 Sargento Cabral 2131  
 Casilla de Correo 209  
 3400 Corrientes, Argentina  
 FABACEAE (LIBRARY)

Dr. Solange Blaise  
 Faculté des Sciences  
 Laboratoire de Biologie Végétale  
 Bâtiment 362  
 F-91405 Orsay Cedex, France  
 LOTUS (TANINS AND CYANINES)  
 LOTUS CORNICULATUS (TANINS AND  
 CYANINES)

Dr. Leon Brimer  
 Dept. of Pharmacology & Toxicology  
 Royal Veterinary & Agricultural Univ.  
 Pathology, 13, Bülowsvej  
 Frederiksberg C, Denmark  
 Voice telephone: 453-528-2828/453-528-3162  
 FAX telephone: 453-135-3514  
 ACACIA (CALLUS CULTURE INITIATION)  
 ACACIA (EXOTIC SPECIES IN EUROPE)

Ing.Agr. María Magdalena Brizuela  
 Lab. y Herbáreo de Plants Vasculares  
 Ciencias Biológicas  
 Ciudad Universitaria II Pabelló 4ºPiso  
 (1428) Buenos Aires, Argentina  
 Voice telephone: 54-1-567-6504  
 FAX telephone: 54-1-567-6504  
 Electronic mail: brizuela@spvasc.edu.ar [Internet]  
 PROSOPIS (ARGENTINA)  
 PROSOPIS (CHILE)  
 VIGNA ADENANTHA (FLORAL BIOLOGY)

Anne Bruneau  
 Department of Botany - PSL  
 University of Reading  
 Whiteknights, P.O. Box 221  
 Reading RG6 2AS, Great Britain  
 Voice telephone: 44-734-318160  
 FAX telephone: 44-734-753676  
 Electronic mail: sbsbrunu@reading.acs.uk  
 [Internet]  
 APIOS  
 ERYTHRINA

Maria Alicia Caccavari  
 Mus. Arg. Cien. Nat. "B. Rivadavia"  
 Av. Angel Gallardo 470  
 Buenos Aires 1405, Argentina  
 Voice telephone: 982-6595  
 FAX telephone: 54-1-982-5243  
 Electronic mail: martalic@muanbe.gov.ar  
 [Internet]  
 MIMOSA (POLLEN DEVELOPMENT)  
 MIMOSEAE (POLLEN, SOUTH AMERICA)  
 PIPTADENIA GROUP (MORPHOLOGY AND  
 STRUCTURE)  
 STRYPHODENDRON (POLLEN)

Hno. Roque Casallas Lasso  
 Museo  
 Universidad de La Salle  
 Apartado Aereo 27389  
 Santafé de Bogotá, D.C., Colombia

Dr. Jenny Chappill  
 Department of Botany  
 University of Western Australia  
 Nedlands 6009, W.A., Australia  
 Voice telephone: 61-9-380-2212  
 FAX telephone: 61-9-380-1001  
 Electronic mail: chappill@uniwa.uwa.edu.au  
 [Internet]  
 FABACEAE (TRIBAL PHYLOGENETICS)  
 JACKSONIA (TRIBE MIRBELIEAE)

Miss Sandy Coles  
 Botanical Institute  
 Department of Biology  
 University of Patras  
 GR-265 Patras, Greece  
 Voice telephone: 061-997-641  
 FAX telephone: 061-997-275  
 CICER

Prof. Daniel Combes  
 I.B.E.A.S., Campus Universitaire  
 Avenue de l'Universite  
 64000 Pau, France  
 Voice telephone: 59-92-31-47  
 FAX telephone: 59-84-16-96  
 Electronic mail: combdelb@crisv2.univ-pau.fr  
 [Internet]  
 LATHYRUS

Dr. R.S. Cowan  
 3 Bass Close  
 East Cannington, WA 6107, Australia  
 Voice telephone: 09-367-0508/09-458-8581  
 FAX telephone: 09-367-0515  
 ACACIA (PHYLLODE STRUCTURE)  
 ACACIA (PLURINERVIA, AUSTRALIA)  
 ACACIA (SEEDLING MORPHOLOGY)

Dr. Mihaly Czako  
 Department of Biological Sciences  
 University of South Carolina  
 Coker Life Sciences Building  
 700 Sumter Street  
 Columbia, South Carolina 29208 USA  
 Voice telephone: 803-777-8928/803-777-6676  
 FAX telephone: 803-777-4002  
 Electronic mail: czako@spike.psc.sc Carolina.edu  
 [Internet]  
 FABACEAE (FLAVONOID PIGMENTS)  
 FABACEAE (GENETIC  
 TRANSFORMATIONS)

**S. Dhanalakshmi**

Department of Botany  
Bharathiar University  
Coimbatore 641 046 Tamil Nadu, India

Voice telephone: 42222

ACACIA (MICROPROPAGATION)

ACACIA (SEED MORPHOLOGY &  
PHYSIOLOGY)

CLITORIA TERNATEA  
(MICROPROPAGATION)

DELONIX REGIA (SEED MORPHOLOGY &  
PHYSIOLOGY)

DELONIX REGIA (MICROPROPAGATION)

FABACEAE (REPRODUCTIVE BIOLOGY)

FABACEAE (ROOT NODULATION)

FABACEAE (SEEDLINGS)

FABACEAE (ECOLOGY)

**Nadejda Echiku**

Unité Rech. Zones Arides, Lab. de Bot.  
Université d'Alger

B.P. 119 - Alger-Gare, Algerie

Voice telephone: 02-63-31-08

VIGNA UNGUICULATA (GENETIC  
VARIABILITY)

VIGNA UNGUICULATA (ORIGIN OF  
ALGERIAN TYPES)

**Dr. James H. Elgin**

USDA/ARS/NPS

Rm. 326, Bldg. 005, BARC-West

10330 Baltimore Ave.

Beltsville, Maryland 20705-2350 USA

Voice telephone: 301-504-5618

MEDICAGO (GERMPLASM)

**Dr. Thomas S. Elias**

U.S. National Arboretum

3501 New York Avenue, N.E.

Washington, District of Columbia 20004-1958  
USA

Voice telephone: 202-475-4829

FAX telephone: 202-475-5252

FABACEAE (ANATOMY OF GLANDS)

**Dr. Dirk Enneking**

CLIMA

University of Western Australia

Nedlands 6009

Western Australia, Australia

Voice telephone: 09-380-2505

FAX telephone: 09-380-1140

LATHYRUS (GERMPLASM)

VICIA (GERMPLASM)

VICIA (BIOLOGICAL CHEMISTRY OF  
TOXINS)

**Mr. Vicente Espinosa-Hernandez**

University of Oxford

Wolfson College

Linton Road

Oxford OX2 6UD, Great Britain

Voice telephone: 9844-0865-56979

FAX telephone: 0865-274125

Electronic mail: espinosa@vax.ox.ac.uk [Internet]

LUPINUS ARBOREUS (COMPETITION AND  
NICHE DIFFERENTIATION)

**Dr. J.M.O. Eze**

Enugu State University of Sci. & Tech.

**Prof. David L. Dilcher**

Paleobotany Laboratory

Department of Natural Sciences

Florida Museum of Natural History

University of Florida

Gainesville, Florida 32611-2035 USA

Voice telephone: 904-392-6560/904-392-  
6585/904-392-1721

FAX telephone: 904-392-2539/904-392-8783

Electronic mail: dilcher@nerum.uf.edu [Internet]

FABACEAE (FOSSILS)

**Lic. Cs. Susana Inés Drewes**

Lab. Plantas Vasculares (75)

Facultad de Ciencias Exactas Naturales

Pab. II, 4º Piso, Ciudad Universitaria

1428 Buenos Aires, Argentina

Voice telephone: 541-784-8154

FAX telephone: 541-311-0516

Electronic mail: drewes@spvasc.edu.ar [Internet]

MACROPTILIUM (ARGENTINA)

**Dr. Olga N. Dubovik**

Kholodny Institute of Botany

Repin Street, 2

Kiev 252601, Ukraine

Voice telephone: 7-044-225-2038/7-044-452-  
1256

FABACEAE (CAUCASUS)

FABACEAE (UKRAINE, ESPECIALLY  
CRIMEA)

**Dr. James A. Duke**

USDA, ARS, PSI, NGSL

Room 133, Bldg. 001, BARC-West

10330 Baltimore Ave.

Beltsville, Maryland 20705-2350 USA

Voice telephone: 301-504-5419

FAX telephone: 301-504-5536

Adada Campus  
P.O. Box 191  
Nsukka, Nigeria  
Voice telephone: 042-770-178 Extension: 2410  
PARKIA (PHYSIOLOGY)  
PROSOPIS (PHYSIOLOGY)

Dr. Paul R. Fantz  
KI-130, Dept. Hort. Sci. CALS  
North Carolina State University  
Box 7609  
Raleigh, North Carolina 27695-7609 USA  
Voice telephone: 919-515-1186  
FAX telephone: 919-515-7747  
Electronic mail: paul\_fantz@ncsu.edu [Internet]  
BARBIERIA  
CENTROSEMA  
CLITORIA

José Salvador Flores Guido  
Fac. Med. Veter. y Zool., Esc. Biol.  
Km. 15.5 Carretera Xmatkuil  
Apartado postal No. 4-116 Itzimná  
Mérida, Yucatán, México  
Voice telephone: 99-234-009  
FAX telephone: 99-245-730  
FABACEAE (RENEWABLE RESOURCE)

Dr. Enrique Forero  
Institute of Systematic Botany  
The New York Botanical Garden  
Bronx, New York 10458-5126 USA  
Voice telephone: 718-817-8628  
FAX telephone: 718-562-6780  
Electronic mail: eforero@nybg.org [Internet]  
CALLIANDRA (COLOMBIA)  
CALLIANDRA (NEOTROPICS)  
MIMOSOIDEAE (COLOMBIA)

Reneé H. Fortunato  
Instituto de Recursos Biológicos  
1712 Castelar  
Prov. de Buenos Aires, Argentina  
Voice telephone: 54-1-621-0840/54-1-621-1819  
FAX telephone: 54-1-481-4360  
Electronic mail: renee@rbinta.edu [Internet]  
RHYNCHOSIA (SOUTH AMERICA)  
ERIOSEMA (SOUTH AMERICA)  
GALACTIA (SOUTH AMERICA)  
MIMOSA (SOUTH AMERICA)

Mrs. Rakefet Gabay  
Botany Department, Berman Building  
Hebrew University  
Givat-Ram, Jerusalem 91904, Israel

Voice telephone: 972-258-4320  
FAX telephone: 972-266-6804  
LATHYRUS SATIVUS

Biol. Leonardo Galetto  
Museo Botánico  
Casilla de Correo 495  
5000 Córdoba, Argentina  
Voice telephone: 54-51-244009  
FAX telephone: 54-51-244009  
FABACEAE (NECTARY ANATOMY)  
FABACEAE (POLLINATION)

Susana Gama-López  
Laboratorio de Fanerogamia, Dept. Bot.  
Instituto de Biología, UNAM  
Apartado Postal 70-233  
C.P.04510 C.U. Del. Coyoacán, Mexico,DF,  
Mexico  
Voice telephone: 622-5692  
FAX telephone: 525-550-1760  
Electronic mail: gama@redvax1.dgsca.unam.mx  
[Internet]  
STYLOSANTHES

Dr. William F. Grant  
Genetics Laboratory, P.O. Box 4000  
MacDonald Campus of McGill University  
Ste. Anne de Bellevue  
Quebec H9X 3V9, Canada  
Voice telephone: 514-398-7863  
FAX telephone: 514-398-7897  
Electronic mail: ef16@musica.mcgill.ca  
LOTUS

Dr. Walter L. Graves  
%UC Coop. Agric. Ext. San Bernardino  
777 East Rialto Avenue  
San Bernardino, California 92415-0730 USA  
Voice telephone: 909-387-2165  
FAX telephone: 909-387-3306  
FABACEAE (FORAGES)  
FABACEAE (NITROGEN FIXATION)  
LATHYRUS (AGRONOMIC EVALUATIONS)  
MEDICAGO POLYMORPHA (WEEVIL  
TOLERANCE)  
PISUM (AGRONOMIC EVALUATIONS)  
TRIFOLIUM SUBTERRANEUM  
VICIA (AGRONOMIC EVALUATIONS)

**Dr. W. Greuter**

Botanischer Garten u. Botanisches Mus.  
Berlin-Dahlem  
Königin-Luise-Straße 6-8  
D-14191 Berlin 33, Germany  
Voice telephone: 4930-83006-132/4930-831-6010  
FAX telephone: 4930-83006-218  
FABACEAE (MEDITERRANEAN CHECKLIST)

Voice telephone: 0865-275112

FAX telephone: 0865-275074

LEUCAENA (MOLECULAR SYSTEMATICS)

LEUCAENA (PHYLOGENY)

LEUCAENA LEUCOCEPHALA (ORIGIN)

PACHYRHIZUS

**Miss Judith Heald**

ILDIS Coordinating Centre

Biology Department

Univeristy of Southampton

Southampton SO9 3TU, Great Britain

Voice telephone: 0703-592-444

FAX telephone: 0703-594-269

Electronic mail: j.heald@southampton.ac.uk

[Internet]

FABACEAE (ILDIS)

**Prof. Joe Hennen**

Dept. of Botany & Plant Pathology

Purdue University

West Lafayette, Indiana 47907 USA

Voice telephone: 317-494-4623

FAX telephone: 317-494-0363

FABACEAE (RUST FUNGI COEVOLUTION)

**Dr. Patrick S. Herendeen**

Department of Geology

Field Museum of Natural History

Roosevelt Road at Lake Shore Drive

Chicago, Illinois 60605 USA

Voice telephone: 312-922-9410 Extension: 334

FAX telephone: 312-427-7269

FABACEAE (FOSSILS)

**Dr. Patricia Susana Hoc**

Lab. 11, Dpto. Ccias. Biol., UBA

Pab. II, 4 piso

Ciudad Universitaria

1428 Buenos Aires, Argentina

Voice telephone: 54-1-784-8154

ALBIZIA (ARGENTINA)

CALLIANDRA (ARGENTINA)

ENTEROLOBIUM (ARGENTINA)

INGA (ARGENTINA)

PHASEOLEAE (POLLEN)

PROSOPIS (FLORAL BIOLOGY)

VIGNA (ARGENTINA)

**Dr. Patricia Holmgren**

New York Botanical Garden

Bronx, New York 10458 USA

Voice telephone: 718-220-8626

FAX telephone: 718-220-6504

FABACEAE (HERBARIUM MANAGEMENT)

**Dr. James Grimes**

Herbarium

The New York Botanical Garden

Bronx, New York 10458-5126 USA

Voice telephone: 718-220-8727

FAX telephone: 718-220-6504

CULLEN

INGEAE

PSORALEEAE

**Ing.Agr. Maria Cecilia Grottola**

Fac. de Agronomía, Dept. de Ecología

Catedra de Botánica

Av. San Martin 4453 (1417)

Buenos Aires, Argentina

Voice telephone: 54-1-522-0903

FAX telephone: 54-1-522-1687

PHASEOLUS VULGARIS (GERMPLASM)

**Mr. William James Hahn**

Department of Botany

132 Birge Hall

University of Wisconsin

Madison, Wisconsin 53706 USA

Voice telephone: 608-262-4422/608-262-2279

FAX telephone: 608-262-7509

Electronic mail: whahn@macc.wisc.edu [Internet]

MIMOSOIDEAE (PARAGUAY)

**Dylan Hannon**

Missouri Botanical Garden

P.O. Box 299

St. Louis, Missouri 63166-0299 USA

ERYTHRINA (AFRICA)

LUPINUS (UNIFOLIATE)

FABACEAE (XEROPHYTIC, GEOPHYTIC TAXA)

**Dr. Stephen Harris**

Oxford Forestry Institue

Department of Plant Sciences

University of Oxford

South Parks Road, Oxford OX1 3RB, Great

Britain

Mr. Stephen J. Hurst  
 USDA/AMS  
 Bldg. 506, BARC-East  
 10330 Baltimore Avenue  
 Beltsville, Maryland 20705-2350 USA  
 Voice telephone: 301-504-9356  
 Electronic mail: LS.SD.JTRIPLITT  
 FABACEAE (SEEDS)

IICA  
 Orton Memorial Library  
 Turrialba  
 Costa Rica, Costa Rica  
 FABACEAE (LIBRARY)

ILDIS - Africa, West Asia, Indochina  
 Drs. R.M. Polhill and J.M. Lock  
 Royal Botanical Gardens  
 Kew, Richmond  
 Surrey TW9 3AB, Great Britain  
 Voice telephone: 44-81-332-5217  
 FAX telephone: 44-81-332-5278  
 Electronic mail: 296694 KEWGAR G [Telex]  
 FABACEAE (ILDIS, AFRICA, WEST ASIA,  
 INDOCHINA)

IMI, C<sup>o</sup> CAB International  
 Library Services Centre  
 Silwood Park  
 Buckhurst Road, Ascot  
 Berks SL5 7TA, Great Britain  
 Voice telephone: 0344-87-2747  
 FAX telephone: 0344-87-2901  
 Electronic mail: 84:CAU016 [Telecom  
 Gold/Dialcom]  
 FABACEAE (LIBRARY)

D. Sci. Vello Jaaska  
 Department of Botany  
 Institute of Zoology and Botany  
 Academy of Sciences of Estonia  
 21 Vanemuise Street, EE2400 Tartu, Estonia  
 FAX telephone: 01434-33472  
 Electronic mail: vj@iozb.tartu.ee [Internet]

Miss J. Josephine  
 Department of Botany  
 St. Joseph's College  
 Tiruchirapalli - 620 002, India  
 ATYLOSA CAJANIFOLIA (BIOCHEMISTRY &  
 GENETICS)  
 CAJANUS CAJAN (BIOCHEMISTRY &  
 GENETICS)  
 RHYNCHOSIA MINIMA (BIOCHEMISTRY &  
 GENETICS)

RHYNCHOSIA ROTHII (BIOCHEMISTRY &  
 GENETICS)

Prof. Marian Jurzysta  
 Dept. of Biochem. & Crop Quality  
 Institute of Soil Sci. & Plant Cult.  
 24-100 Pulawy, Poland  
 Voice telephone: 48-831-3421 Extension: 207  
 FAX telephone: 48-831-4547  
 MEDICAGO (CHEMOTAXONOMY)  
 MEDICAGO (SAPONINS)

Alexandr A. Kagalo  
 Institute of Ecology of Carpathians  
 Chaikovski Street, 17  
 Lvov 290000, Ukraine  
 Voice telephone: 7-0322-76-7623  
 FABACEAE (DATABASE FOR UKRAINE)  
 FABACEAE (UKRAINE, WEST)

Mrs. Srinivasan Iyengar Kamala  
 National College  
 Tiruchirapalli-620 001  
 South India, India  
 FABACEAE (PHYSIOLOGY OF HERBICIDES)

Dr. Hyesoon Kang  
 Department of Biology Education  
 Seoul National University  
 56-1 Shinlimdong, Kwanakku  
 Seoul, 151-742, Korea  
 Voice telephone: 02-880-7769  
 FAX telephone: 02-889-8791  
 FABACEAE (MORPH DIVERGENCE OF  
 REPRODUCTION)

Dr. Alan Kapuler  
 2385 SE Thompson Street  
 Corvallis, Oregon 97333 USA  
 Voice telephone: 503-752-0421  
 FAX telephone: 503-753-0604  
 FABACEAE (PHYLOGENETIC GARDEN  
 LAYOUT)

Dr. A. Douglas Kinghorn  
 Dept. Medicinal Chem. & Pharm.  
 University of Illinois at Chicago  
 833 South Wood Street  
 Chicago, Illinois 60612 USA  
 Voice telephone: 312-996-0914  
 FAX telephone: 312-996-3272  
 FABACEAE (ALKALOIDS)  
 FABACEAE (SWEET-TASTING  
 CONSTITUENTS)

Dr. John M. Kingsolver

Florida State Collection of Arthropods  
P.O. Box 147100  
Gainesville, Florida 32614-7100 USA  
Voice telephone: 904-372-3505 Extension: 197  
FABACEAE (BRUCHIDS)  
FABACEAE (BRUCHIDS, CHILE)  
FABACEAE (BRUCHIDS, COSTA RICA)

Dr. Geoffrey Charles Kite

Biochemistry Section, Jodrell Lab.  
Royal Botanic Gardens  
Kew, Richmond, Surrey TW9 3AB, Great  
Britain  
Voice telephone: 44-81-940-1171  
CAESALPINIA (NON-PROTEIN AMINO  
ACIDS)  
CAESALPINIOIDEAE (CHEMOTAXONOMY)

N. Kolyasnikova

Perm University, Department of Botany  
Bukirev Street 15  
614600 Perm, GSP, Russia  
MEDICAGO (PERENNIAL SPECIES,  
REPRODUCTIVE BIOLOGY)

Dr. Tatiana E. Kramina

Department of Higher Plants  
Biological Faculty  
Moscow State University  
Moscow 119899, Russia  
Voice telephone: 095-939-16-03  
FAX telephone: 095-168-82-49  
Electronic mail: libro@genebee.msu.su [Internet]  
LOTUS (RUSSIA)  
LOTUS CORNICULATUS

Dr. Teresa Amalia Kraus

Universidad Nacional de Río Cuarto  
Facultad de Agronomía. Morfología Veg.  
Enlaces ruta 8 y 36  
5800 Río Cuarto, Córdoba, Argentina  
Voice telephone: 0586-33858  
FAX telephone: 0586-45980  
CAESALPINIOIDEAE (INFLORESCENCE  
MORPHOLOGY)  
MIMOSOIDEAE (INFLORESCENCE  
MORPHOLOGY)

S. Thanga Krishnakumari

St. Joseph's College  
Trichirapalli - 620002  
Tamil Nadu, India  
FABACEAE (HOMONES)  
VIGNA MUNGO (HORMONES)

A. J. Kruger

Roodeplaat Grassland Institute  
Private Bag X05  
Lynn East 0039, South Africa  
Voice telephone: 012-808-0808  
FAX telephone: 012-808-2155  
Electronic mail: vewajk@nigs386.els.ac.za  
FABACEAE (GERMPLASM)

Dr. Boguslav S. Kurlovich

Department of Leguminous Crops  
N.I. Vavilov Institute of Pl. Industry  
42, B. Morskaya Street  
190 000 St. Petersburg, Russia  
Voice telephone: 812-314-4732  
FAX telephone: 812-311-8762  
FABACEAE (GERMPLASM)

Dr. Tatjana N. Kusnetzova

Apt. 8  
31, Ostuzheva Street  
Moscow 103001, Russia  
Voice telephone: 095-299-82-29  
Electronic mail: 9v@s43.msk.su  
[Relcom/Internet]  
ASTRAGALUS (FLOWER ARRANGEMENT)  
GENISTEAE (FLOWER ARRANGEMENT)  
PAPILIONOIDEAE (FLOWER  
ARRANGEMENT)  
THERMOPSIS (FLOWER ARRANGEMENT)

Dr. Victor Ya. Kuzevanov

Botanic Garden, Irkutsk State Univ.  
Kolysov Street, 93  
P.O. Box 1457, Irkutsk  
664039, Russia  
Voice telephone: 7-095-420-2106/  
7-3952-332-238  
Electronic mail: vic@bograd.irkutsk.su [Internet]  
FABACEAE (GERMPLASM)

Dr. D. O. Ladipo

ICRAF-IITA-OSU MPT Project  
c/o IITA, Oyo Road  
P.M.B. 5320  
Ibadan, Nigeria  
Voice telephone: 521450  
FAX telephone: 521001  
Electronic mail: 22048 [Telex]  
FABACEAE (AGROFORESTRY)  
FABACEAE (BREEDING, AGROFORESTRY)  
FABACEAE (GERMPLASM,  
AGROFORESTRY)  
FABACEAE (GENETICS, AGROFORESTRY)

**FABACEAE (MULTIPURPOSE TREE SPECIES)**

**Dr. Jean H. Langenheim**

Department of Biology  
Sinsheimer Laboratory  
University of California  
Santa Cruz, California 95064 USA

Voice telephone: 408-459-2918

FAX telephone: 408-459-3139

**FABACEAE (RESIN-PRODUCING GENERA)**

**COPAIFERA**

**HYMENAEA**

**Prof. Kai Larsen**

Department of Systematic Botany  
University of Aarhus

Nordlandsvej 68

DK-8240 Risskov, Denmark

Voice telephone: 45-86-21-06-77

FAX telephone: 45-86-21-18-91

**BAUHINIA (TROPICAL ASIA)**

**CASSIA (TROPICAL ASIA)**

**Dr. Matt Lavin**

Department of Biology

Montana State University

Bozeman, Montana 59717-0001 USA

FAX telephone: 406-994-3190

Electronic mail: [ubiml@msu.oscs.montana.edu](mailto:ubiml@msu.oscs.montana.edu)

[Internet]

**COURSETIA**

**FABOIDEAE (TEMPERATE HERBACEOUS)**

**FABOIDEAE (TROPICAL WOODY)**

**Dr. Sang Sun Lee**

Dept. of Biol. Sci. and Educ.

Korea National University of Education

Kang Lae Myun Chung Won Kun

Chung Puk 363-791, Korea

Voice telephone: 82-431-60-3702

FAX telephone: 82-431-272-2330

Electronic mail: [sslee@knuacc-sun.knue.ac.kr](mailto:sslee@knuacc-sun.knue.ac.kr)

[Internet]

**FABACEAE (ARBUSCULAR MYCORRHIZAL FUNGI)**

**FABACEAE (RHIZOBIAL CELL)**

**Dr. Jorge Leon**

Apt. 480

San Pedro, Montes de Oca, Costa Rica

Voice telephone: 506-25-00-50

**FABACEAE**

**Prof. Nels R. Lersten**

Department of Botany

Iowa State University

Ames, Iowa 50011 USA

Voice telephone: 515-294-2169

FAX telephone: 515-294-1337

Electronic mail: [dgl.si@isumvs](mailto:dgl.si@isumvs)

**CAESALPINIEAE (LEAF ANATOMY)**

**FABACEAE (SYSTEMATIC ANATOMY)**

**Prof. Ruijun Li**

Department of Biology

Harbin Normal University

Harbin 150080, People's Republic of China

**VICIA (NORTHEASTERN CHINA)**

**Librarian**

Royal Botanic Gardens

Mrs. Macquarie's Road

Sydney, New South Wales 2000, Australia

Voice telephone: 02-231-8152

FAX telephone: 02-251-7231

**FABACEAE (LIBRARY)**

**Library**

Botanisk Centralbibliotek

Sølvgade 83, Opg. S

DK-1307 København K, Denmark

Voice telephone: 01-12-31-46

**FABACEAE (LIBRARY)**

**Library**

Serials and Exchange

New York Botanical Garden

Bronx, New York 10458-5126 USA

Voice telephone: 718-220-8761

**FABACEAE (LIBRARY)**

**Library**

Unidad de Recursos Geneticos

Centro Agron. Tropical de Invest.

Turrialba, Costa Rica

**FABACEAE (LIBRARY)**

**Dr. Alan W. Lievens**

Horticulture Department

Missouri Botanical Garden

P.O. Box 299

St. Louis, Missouri 63166-0299 USA

Voice telephone: 314-577-5107

FAX telephone: 314-577-9465

Electronic mail: [lievens@mobot.org](mailto:lievens@mobot.org) [Internet]

**INDIGOFERA (NORTH AMERICA)**

Dr. Aaron Liston

Department of Botany  
Oregon State University  
Corvallis, Oregon 97331 USA  
Voice telephone: 503-737-5301  
FAX telephone: 503-737-3573  
Electronic mail: listona@cgrb.orst.edu  
ASTRAGALUS SECT. LEPTOCARPI  
(CHEMOTAXONOMY)  
GALEGEAE (PHYLOGENY)

Dr. Eduardo Lleras-Peréz

CENARGEN/EMBRAPA  
Caixa Postal 10.2372  
70.770 Brasília, DF, Brazil  
Voice telephone: 61-273-0100/61-272-4203  
FAX telephone: 61-274-3212  
FABACEAE (GERMPLASM)

Dr. J. M. Lock

Royal Botanic Gardens  
Kew, Richmond  
Surrey TW9 3AB, Great Britain  
Voice telephone: 81-332-5299  
FAX telephone: 81-332-5278  
FABACEAE (INDO-CHINA)  
FABACEAE (WEST ASIA)  
FABACEAE (TROPICAL AFRICA)

Dr. Melissa Luckow

Bailey Hortorium  
462 Mann Library  
Cornell University  
Ithaca, New York 14853 USA  
Voice telephone: 607-255-7829  
FAX telephone: 607-255-7979  
DESMANTHUS

Ing.For. Anibal Luna

Instituto Forestal Latinoamericano  
Apertado 36  
Mérida 5101-A, Venezuela

Mr. Smart Lungu

Botany Department, Fac. Pl. Sciences  
University of Reading  
Whiteknights, P.O. Box 221  
Reading, RG6 2AS, Great Britain  
Electronic mail: sbrlungu@reading.ac.uk  
[Internet]  
ENTADA

Dr. Albert Yu. Magulaev

Dzerzhinski Str., 153 "b", k. 19  
Stavropol-17, 355017, Russia

Voice telephone: 86522-2-85-29  
FABACEAE (CHROMOSOMES, NORTH  
CAUCASIA)

Laurie A. McHargue

Dade County Park and Recreation Dept.  
Natural Areas Management  
22200 SW 137th Avenue  
Miami, Florida 33170 USA  
Voice telephone: 305-257-0933  
FAX telephone: 305-257-0937  
FABACEAE (TROPICAL NODULATION  
ECOLOGY)

Cons.Fl. Marcos Menandro

Caixa Postal 81.793  
27.501-970 Resende  
Estado do Rio de Janeiro, Brazil  
Voice telephone: 0243-54-4638

Sr. Carlos Victor Mendonça Filho

Dept<sup>o</sup> Botânica - ICB, UFMB  
Av. Antônio Carlos, 6627  
Caixa Postal 2486  
20070 Belo Horizonte, MG, Brazil  
Voice telephone: 031-448-1195  
MACHAERIUM (BRAZIL, SOUTHERN)  
MACHAERIUM SECT. OBLONGA

Vlastimil Mikoláš

Botanical Garden-Herbarium  
23, Mánes Street  
SK-043 52 Košice, Slovakia

Dr. Sue J. Milton

Tierberg Karoo Research Centre  
P.O. Box 47  
Prince Albert 6930, Republic of South Africa  
Voice telephone: 27-4436-828  
FAX telephone: 27-4436-828  
ACACIA (WEEDY SPECIES, AUSTRALIA)  
ACACIA (PHENOLOGY, AFRICA)  
ACACIA (DEFOLIATION, AFRICA)  
ACACIA ERIOLOBA (ASSOCIATED ANIMALS  
IN SW AFRICA)

Mr. Dmitri A. Moiseev

Department of Botany and Biology  
Biological Faculty, University  
Pr. Lenina, 51  
Ekaterinburg 620083, Russia  
Voice telephone: 3432-22-05-48  
TRIFOLIUM SECTION LUPINASTER

Dr. Reinaldo Monteiro

Departamento de Botânica, I.B. - UNESP  
 IB - UNSEP  
 Caixa Postal 199  
 Rio Claro, São Paulo, Brazil  
 Voice telephone: 0195-340244 Extension: 141  
 FAX telephone: 0195-344433  
 Electronic mail: uercb A br fapesp.bitnet  
 SESBANIA (NEW WORLD)  
 LUPINUS (BRAZIL)

Fátima M.S. Moreira

Departamento de Ciências do Solo  
 Escola Superior de Agric. de Lavras  
 Caixa Postal 37  
 27200-000 Lavras, Minas Gerais, Brazil  
 Voice telephone: 035-821-3700 Extension:  
 335/175

Dr. Jorge Morera

Centro Agron. Tropical de Invest.  
 Turrialba, Costa Rica  
 Voice telephone: 506-56-64-40  
 FAX telephone: 506-56-15-33

Mr. Tim Morton

SUNY Stony Brook  
 Department of Ecology and Evolution  
 Stony Brook, New York 11794-5245 USA  
 Voice telephone: 516-632-8600  
 FAX telephone: 516-632-7626  
 Electronic mail: morton@sbbiovm.bitnet [Bitnet]  
 INGA (COSTA RICA)  
 INGEAE  
 INGEAE (NONPROTEIN AMINO ACIDS)

Ms. Helen Moss

63 End Road  
 Linden Extension  
 Randburg 2194, Republic of South Africa  
 Voice telephone: 27-11-888-2596  
 FAX telephone: 27-11-888-2596  
 FABACEAE (FORAGES, CENTRAL AFRICA)  
 FABACEAE (FORAGES, SOUTHERN  
 AFRICA)  
 VIGNA (ASIA)

Dr. Brian Murray

Department of Botany  
 University of Auckland  
 Private Bag 92019  
 Auckland, New Zealand  
 Voice telephone: 64-9-373-7999  
 FAX telephone: 64-9-373-7416  
 Electronic mail: brian\_murray@bio.aukuni.ac.nz

[Internet]

LATHYRUS (CYTOGENETICS)  
 LATHYRUS (INTERSPECIFIC  
 HYBRIDIZATION)

Dr. Robert Nash

AFRC Inst. Grassland Environ. Research  
 Plas Gogerddan, Aberystwyth  
 Dyfed, SY23 3EB, Great Britain  
 Voice telephone: 0970-828-255  
 FAX telephone: 0970-828-357  
 FABACEAE (CHEMISTRY)

Dr. Randall Nelson

USDA/ARS, Department of Agronomy  
 University of Illinois  
 1102 South Goodwin Avenue  
 Urbana, Illinois 61801 USA  
 Voice telephone: 217-244-4346  
 FAX telephone: 217-333-4639  
 GLYCINE (GERMPLASM)

M.Sc. Poul Erik Nielsen

The Yam Bean Project  
 Research Division, MAF  
 P.O. Box 14, Nuku'alofa, Tonga  
 Voice telephone: 676-24-253/676-32-125  
 FAX telephone: 676-24-271  
 PACHYRHIZUS (FIELD TRIALS, TONGA)  
 PACHYRHIZUS (HYBRIDIZATION)

Dr. Elena V. Nikolaevskaya

Department of Botany  
 Severo-Osetia University  
 Butyrina St., 46  
 362025 Vladikavkaz, Russia  
 Voice telephone: 867-223-30-67  
 FABACEAE (LEAF ANATOMY, NORTH  
 CAUCASUS)

Dr. Natalie Novikova

Res. Instit. for Agri. Microbiology  
 Podbelski ch., 3  
 Pushkin  
 Saint Petersburg 189620, Russia  
 Voice telephone: 7-812-476-1802  
 FAX telephone: 7-812-470-4362  
 Electronic mail: novikova@riam.spb.su [Internet]  
 FABACEAE (ROOT NODULE BACTERIA,  
 SYSTEMATICS)

Larisa Novoselova  
 Perm University, Department of Botany  
 Bukirev Street 15  
 614600 Perm, GSP, Russia  
 MEDICAGO (ANNUAL SPECIES,  
 REPRODUCTIVE BIOLOGY)  
 MEDICAGO (REPRODUCTIVE BIOLOGY)  
 MEDICAGO SECT. HYMENOCARPOS  
 (REPRODUCTIVE BIOLOGY)  
 MEDICAGO SECT. LUPULARIA  
 (REPRODUCTIVE BIOLOGY)  
 MEDICAGO SECT. ORBICULARIS  
 (REPRODUCTIVE BIOLOGY)  
 MEDICAGO SECT. SPIROCARPOS  
 (REPRODUCTIVE BIOLOGY)

Dr. Hugh Goldie Komla Nyawuame  
 Botany Department  
 University of Cape Coast  
 Cape Coast, Ghana  
 FABACEAE (NIGERIA - PROTEIN  
 CONTENT)  
 FABACEAE (NIGERIA - GENETIC  
 VARIABILITY)

Joseph O'Brien  
 Department of Biology  
 Florida International University  
 University Park  
 Miami, Florida 33199 USA  
 Voice telephone: 305-348-3415  
 FAX telephone: 305-248-1986  
 Electronic mail: obrienj@servax.fiu.edu  
 [Internet]  
 AMORPHA CREMULATA (POPULATION  
 GENETICS)  
 GALACTIA (ECOLOGY & POPULATION  
 BIOLOGY, SOUTH FLORIDA)

M.Sc. Maria de L. A. A. de Oliveira  
 Museo de Ciências Naturais  
 Fund. Zoobotânica de Rio Grande do Sul  
 Caixa Postal 1188  
 90.690.000 Porto Alegre, RS, Brazil  
 Voice telephone: 051-336-1511  
 FAX telephone: 051-336-1778  
 AESCHYNOMENE (RIO GRANDE DO SUL,  
 BRAZIL)  
 DESMEDIUM (RIO GRANDE DO SUL,  
 BRAZIL)  
 LUPINUS (RIO GRANDE DO SUL, BRAZIL)  
 POIRETIA (RIO GRANDE DO SUL, BRAZIL)

Ms. Amanda Ortíz  
 Genetic Resources Unit - CIAT

Apartado Aéreo 6713  
 Cali, Colombia  
 Voice telephone: 57-23-675-050 Extension: 625  
 FAX telephone: 57-23-647-243  
 Electronic mail: CGI 301  
 ARACHIS PINTOI (ISOENZYMES,  
 MORPHOLOGY)  
 FABACEAE (TROPICAL FORAGE  
 GERMPLASM)  
 STYLOSANTHES CAPITATA (ISOENZYMES,  
 MORPHOLOGY)

Mr. Azad M. Osman  
 Faculty of Agriculture  
 University of Mauritius  
 Reduit, Mauritius  
 Voice telephone: 54-1041  
 FAX telephone: 54-9642  
 LEUCAENA  
 SESBANIA (AGRONOMY)

Carlos Ovalle  
 Experiment Station Quilamapu  
 I.N.T.A.  
 Casilla 426  
 Chillan, Chile  
 Voice telephone: 56-42-22-11-79  
 ACACIA CAVEN  
 FABACEAE (NITROGEN-FIXING, SOUTH  
 AMERICA)

Ing. Agr. Ramon Antonio Palacios  
 Lab. Pl. Vasc., U. Buenos Aires  
 Pabellon Ii, 4 Piso  
 Ciudad Universitaria  
 1428 Buenos Aires, Argentina  
 Voice telephone: 54-1-784-8154  
 Electronic mail: palacios@s.p.vascc.edu.ar  
 [Internet]  
 PHASEOLUS

Dr. Nonna S. Pavlova  
 Institute of Biology and Soils  
 100-letiya-Vladivostoka Street, 159  
 Vladivostok 690022, Russia  
 Voice telephone: 7-4232-31-04-07  
 FABACEAE (RUSSIAN FAR EAST)

Esteban A. Pizarro  
 SQS 213 Bloco G apt. 502  
 70.292/070 Brasilia, DF, Brazil  
 FAX telephone: 55-61-389-3016  
 ARACHIS (TROPICAL FORAGE)  
 CALOPOGONIUM (TROPICAL FORAGE)

CENTROSEMA (TROPICAL FORAGE)  
STYLOSANTHES (TROPICAL FORAGE)

Plant Science Library

Los Angeles St. & Co. Arboretum  
301 North Baldwin Avenue  
Arcadia, California 91007-2697 USA  
Voice telephone: 818-821-3213  
FAX telephone: 818-445-1217  
FABACEAE (LIBRARY)

Dr. Rosita J. Plennik

Laboratory of Forage Plant Introd. & Cult.  
Central Siberian Botanical Garden  
Zolotodolinskaya Str., 101  
Novosibirsk 630090, Russia  
Voice telephone: 35-30-47  
FAX telephone: 383-2-35-49-86  
FABACEAE (SIBERIAN, INTRODUCTION)

Dr. Larisa P. Podolnaya

Vavilov Institute of Plant Industry  
B. Morskaya Street, 42  
St. Petersburg 190000, Russia  
MEDICAGO (FRUIT AND SEED ANATOMY  
AND MORPHOLOGY)  
TRIGONELLA (FRUIT AND SEED  
ANATOMY AND MORPHOLOGY)

Dr. D. S. Pokle

Department of Botany  
Deogiri College  
Aurangabad - 431 002, India  
ALYSICARPUS (INDIA)  
FABACEAE (FLORISTICS, INDIA,  
AURANGABAD)

Dr. Elena Potokina

Herbarium  
Vavilov Institute of Plant Industry  
B. Morskaya Street, 42  
St.-Petersburg 190000, Russia  
Voice telephone: 812-314-79-54  
VICIA  
VICIA (POLYMORPHISM OF NATIVE  
POPULATIONS)

S.V. Predeep

Botanical Survey of India  
P.O. Botanic Garden  
Howrah - 711 103, India  
Voice telephone: 60-1038  
CLITORIINAE (INDIA)  
DIOCLEINAE (INDIA)  
ERYTHRININAE (INDIA)

GLYGININAE (INDIA)  
PHASEOLEAE SUBTRIBE CLITORIINAE  
(INDIA)

T.E. Ruby Punithavathy

St. Joseph's College  
Trichirapalli - 620002  
Tamil Nadu, India  
FABACEAE (HERBICIDES)

M.Sc. Luciano Queiroz

Univ. Estadual de Feira de Santana  
Depto. de Ciências Biológicas  
Km. 03 - BR 116 - Campus  
44100 Feira de Santana, Bahia, Brazil  
Voice telephone: 075-224-1521 Extension: 214  
FAX telephone: 075-224-2284/075-224-2075

CRATYLIA

DIOCLEINAE (POLLINATION AND  
EVOLUTION)

FABACEAE (FORAGE IN THE CAATINGA)  
MOLDENHAWERA

C. Rabaa

Laboratoire de'Eco-Génétique  
Institut des Sciences de la Nature  
USTHB  
B.P. 39 El Alia, Algiers, Algeria  
VIGNA (HYBRIDIZATION)

Mr. Maxim A. Radionenko

Acad. Sci. Ukraine  
Isnt. Cell Biol. Genet. Eng.  
Zabolotnogo street 148, Kiev-GSP-22  
252 022, Ukraine  
Voice telephone: 266-33-83  
FAX telephone: 266-71-04  
FABACEAE (GENETIC ENGINEERING)

Dr. Luis Ramírez-Avilés

Universidad de Yucatan  
Facultad de Veterinaria  
Apartado Postal 4-116  
Mérida, Yucatán 97100, Mexico  
Voice telephone: 99-871896  
FAX telephone: 99-871896  
AESCHYNOMENE (MANAGEMENT AND  
ENVIRONMENTAL RESPONSES)  
ARACHIS (MANAGEMENT AND  
ENVIRONMENTAL RESPONSES)  
CENTROSEMA (MANAGEMENT AND  
ENVIRONMENTAL RESPONSES)  
LEUCAENA (MANAGEMENT AND  
ENVIRONMENTAL RESPONSES)

**Sergei Repjev**

Vavilov Institute of Plant Industry  
B. Morskaya Street, 42  
St. Petersburg 190000, Russia  
VICIA (GERMPLASM)

KUNSTLERIA (PHYLOGENY)  
SPATHOLOBUS (PHYLOGENY)

**Dr. Henry A. Rodriguez-Carrasquero**

Apartado de Correos #24  
Merida 5101-A, Venezuela  
Voice telephone: 58-74-401583/58-74-441115  
FAX telephone: 58-74-401503  
FABACEAE (VENEZUELA)

**John T. Romeo**

Department of Biology  
University of South Florida  
Tampa, Florida 33620 USA  
Voice telephone: 813-974-3250  
FAX telephone: 813-974-3263  
Electronic mail: romeo@chuma.cas.usf.edu  
[Internet]  
CALLIANDRA (CHEMISTRY)  
INGA (CHEMISTRY)

**Prof. Gerald A. Rosenthal**

101 T.H. Morgan Building  
Biochemical Ecology Laboratory  
University of Kentucky  
Lexington, Kentucky 40506 USA  
Voice telephone: 606-257-2652  
FAX telephone: 606-323-1059  
FABACEAE (BIOCHEMICAL ECOLOGY)  
FABACEAE (BIOCHEMISTRY)  
FABACEAE (NONPROTEIN AMINO ACIDS)

**Dr. Yuri R. Roskov**

Herbarium  
V.L. Komarov Botanical Institute  
Prof. Popov Street 2  
St. Petersburg 197376, Russia  
Voice telephone: 812-234-84-63  
FAX telephone: 812-234-45-12  
Electronic mail: binran@glas.apc.org [Internet]  
FABACEAE (ILDIS FOR RUSSIA)  
MEDICAGO (FORMER USSR)  
MELILOTUS (FORMER USSR)  
TRIFOLIUM (FORMER USSR)

**Vadim A. Sagalaev**

Botany Department  
Volgograd Pedagogical University  
Lenins Prospect, 27  
400013 Volgograd, Russia  
ASTRAGALUS (FLORA OF LOWER VOLGA)

**Mr. Chinbatyn Sanchyr**

Herbarium

**Prof. Fred Rickson**

Department of Botany & Plant Pathology  
Oregon State University  
Cordley Hall 2082

Corvallis, Oregon 97331-2902 USA

Voice telephone: 503-737-5272

FAX telephone: 503-737-3573

Electronic mail: rickson@bcc.orst.edu

AMHERSTIA (PHYLOGENY,  
BIOGEOGRAPHY,

MORPHOLOGY/ANATOMY)

FABACEAE (ANT PLANTS,

MORPHOLOGY/ANATOMY)

HUMBOLDTIA (PHYLOGENY,

BIOGEOGRAPHY,

MORPHOLOGY/ANATOMY)

LEONARDOXA (PHYLOGENY,

BIOGEOGRAPHY,

MORPHOLOGY/ANATOMY)

SARACA (PHYLOGENY, BIOGEOGRAPHY,

MORPHOLOGY/ANATOMY)

TAMARINDUS (PHYLOGENY,

BIOGEOGRAPHY,

MORPHOLOGY/ANATOMY)

**Dr. M. de Lourdes Rico-Arce**

Herbarium

Royal Botanic Gardens

Kew, Richmond

Surrey, TW9 3AE, Great Britain

Voice telephone: 081-940-1171

FAX telephone: 081-948-1197

Electronic mail: l.rico@rbgkew.org.uk [Internet]

ACACIA, FILICINAE (NEOTROPICAL)

ACACIA, ACULEIFERUM (NEOTROPICAL)

ACACIA, ACACIAE (NEOTROPICAL)

PITHECELLOBIUM (NEW WORLD)

INGEAE

**Dr. Jeannette Ridder-Numan**

Rijksherbarium/Hortus Botanicus

Postbus 9514

2300 RA Leiden, Netherlands

Voice telephone: 071-273572/00

FAX telephone: 071-273511

Electronic mail: ridder@rulrhb.leidenuniv.nl

[Internet]

BUTEA (PHYLOGENY)

FABACEAE (BIOGEOGRAPHY, SE ASIA)

Komarov Botanical Institute  
 Prof. Popov Street, 2  
 St. Petersburg 197376, Russia  
 CARAGANA (INTRODUCTION INTO  
 MONGOLIA)  
 CARAGANA (TAXONOMY)

Dr. Michael J. Sanderson  
 Department of Biology / 314  
 University of Nevada, Reno  
 Reno, Nevada 89557 USA  
 Voice telephone: 702-784-1703  
 FAX telephone: 702-784-1302  
 Electronic mail: sander-m@equinov.unr.edu  
 [Internet]  
 ASTRAGALUS (MOLECULAR  
 PHYLOGENTICS)  
 GALEGEAE (MOLECULAR PHYLOGENTICS)

Dr. V.V.L.N. Sarma  
 Department of Botany  
 1-6-170, Jubleepura  
 Khammam 507003 A.P., India

Dr. Ignacimuthu Savarimuthu, S.J.  
 Department of Botany  
 St. Joseph's College (Autonomous)  
 Tiruchirapalli - 620 002, India  
 FABACEAE (PULSES, NITROGEN FIXING)  
 FABACEAE (PULSE IMPROVEMENT)  
 FABACEAE (RHIZOBIA, WILD)

Dr. Rudolf Schmid  
 Department of Integrative Biology  
 University of California, Berkeley  
 Berkeley, California 94720 USA  
 Voice telephone: 510-525-0439  
 FAX telephone: 510-643-6264  
 Electronic mail: schmid@garnet.berkeley.edu  
 [Internet]  
 FABACEAE (PUBLICATION REVIEWS,  
 TAXON)

Stud.Agr Axel Schmidt  
 Universität Hohenheim  
 Inst. für Pflanzenbau in Tropen (380)  
 Postfach 700562  
 D-70593 Stuttgart, Germany  
 Voice telephone: 49-711-450-2764/49-711-703-  
 995  
 FAX telephone: 49-711-459-2304  
 Electronic mail: @nsl.nz.uni\_hohenheim.de  
 docto [Internet]

Dr. Andrew Schnabel  
 Department of Botany  
 353 Bessey Hall  
 Iowa State University  
 Ames, Iowa 50011-1020 USA  
 FAX telephone: 515-294-1337  
 Electronic mail: al.afs@isumvs  
 GLEDITSIA (CLADISTIC BIOGEOGRAPHY)  
 GYMNOCLADUS (CLADISTIC  
 BIOGEOGRAPHY)

Dr. Brian Schrire  
 Herbarium, Royal Botanic Gardens  
 Kew, Richmond  
 Surrey TW9 3AB, Great Britain  
 Voice telephone: 081-940-1171 Extension: 4237  
 FAX telephone: 081-948-1197  
 INDIGOFEREAE (AFRICA)  
 MILLETTIEAE (AFRICA)  
 FABOIDEAE (SOUTH AFRICAN  
 BIOGEOGRAPHY)

Prof. Rainer Schultze-Kraft  
 Universität Hohenheim (380)  
 D-70593 Stuttgart, Germany  
 Voice telephone: 49-711-459-2764  
 FAX telephone: 49-711-459-2304  
 Electronic mail: inst380@dsOruh11 [Bitnet]  
 CENTROSEMA  
 FABACEAE (GERMPLASM)

Prof. David S. Seigler  
 Department of Plant Biology  
 University of Illinois  
 265 Morrill Hall  
 505 S. Goodwin Avenue  
 Urbana, Illinois 61801 USA  
 Voice telephone: 217-333-7577  
 FAX telephone: 217-244-7246  
 Electronic mail: dave\_seigler@qmsl.life.uiuc.edu  
 [Internet]  
 ACACIA (CHEMOSYSTEMATICS,  
 CYANOGENESIS)  
 PITHECELLOBIUM (CHEMOSYSTEMATICS,  
 CYANOGENESIS)

Dr. Henry L. Shands  
 USDA/ARS/NPS  
 Rm. 140, Bldg. 005, BARC-West  
 10300 Baltimore Avenue  
 Beltsville, Maryland 20705-2350 USA  
 Voice telephone: 301-504-5311  
 Electronic mail: shands [USDA, ARS, GRIN]  
 FABACEAE (GERMPLASM)

Ms. Bulyak A. Sharipova  
 Institute of Botany  
 Karamov Str., 27  
 Dushanbe 734017, Tadzhikistan Republic  
 Voice telephone: 31-36-16  
 FABACEAE (TADZHIKISTAN)

Prof. Charles E. Simpson  
 Texas Agric. Exp. Stn.  
 P.O. Box 292  
 Stephenville, Texas 76401-0292 USA  
 Voice telephone: 817-968-4144  
 FAX telephone: 817-965-3759  
 Electronic mail: c-simpson@tamu.edu [Internet]

Marcos Sobral  
 CPG Farmácia, UFRGS  
 Ipiranga 2752  
 90.610 Porto Alegre, Rio Grande do Sul, Brazil  
 MIMOSA (RIO GRANDE DO SUL, BRAZIL)

Mr. Dmitry D. Sokoloff  
 Department of Higher Plants  
 Moscow State University  
 Moscow 119899, Russia  
 Voice telephone: 095-425-45-26  
 Electronic mail: sokoloff@frmeu51.bitnet [Bitnet]  
 ANTHYLLIS VULNERARIA (TAXONOMY)

Mr. Mario Sousa-Pena  
 Department of Ecology & Evol. Biology  
 University of Connecticut  
 Box U-43  
 75 N. Eagleville Road  
 Storrs, Connecticut 06269-3043 USA  
 Voice telephone: 203-486-1890  
 FAX telephone: 203-486-6364  
 Electronic mail: sousapen@uconnvm  
 PHASEOLUS COCCINEUS (POLLINATION)

Dr. Calvin Sperling  
 USDA/ARS/NGRL  
 Rm. 321, Bldg. 001, BARC-West  
 10300 Baltimore Avenue  
 Beltsville, Maryland 20705-2350 USA  
 Voice telephone: 301-504-5251  
 FAX telephone: 301-504-5536  
 FABACEAE (GERMPLASM)

Mr. Richard Spjut  
 USDA/ARS, SB&ML,  
 Rm. 304, Bldg. 011A, BARC-West  
 10300 Baltimore Avenue  
 Beltsville, Maryland 20705-2350 USA

Voice telephone: 301-504-8394  
 FAX telephone: 301-504-5810  
 Electronic mail:  
 JKIRKBRIDE@ASRR.ARSUSDA.GOV  
 [Internet]  
 CYNOMETRA (ECOLOGY)  
 CYNOMETRA (PHYTOGEOGRAPHY)  
 CYNOMETRA (TAXONOMY)

Dr. Basil Stergios D.  
 Herbário Universitario  
 UNELLEZ  
 Mesa de Cavacas, Edo. Portuguesa  
 3323, Venezuela  
 Voice telephone: 58-57-68006/68007/68008  
 FAX telephone: 58-57-68156  
 ALDINA (TAXONOMY)  
 CAMPSIANDRA (TAXONOMY)  
 CAESALPINIEAE (FLORA OF THE GUINAS)  
 CAESALPINIEAE (VENEZUELA)  
 FABACEAE (SOUTH AMERICAN TREES)

Prof. Rod J. Summerfield  
 Dept. Agriculture, Univ. of Reading  
 Earley Gate, P.O. Box 236  
 Reading RG6 2AT, Berkshire, Great Britain  
 Voice telephone: 0734-318482  
 FAX telephone: 0734-352421  
 Electronic mail: 847813 [Telex]  
 PHASEOLEAE (CROP PHYSIOLOGY)  
 VICIEAE (CROP PHYSIOLOGY)

Dr. Maria José Suso  
 Instituto de Agricultura Sostenible  
 Apartado 4084  
 14080 Córdoba, Spain  
 Voice telephone: 957-293333  
 FAX telephone: 957-202721  
 CICER  
 VICIA FABIA

Dr. Wojciech Swiecicki  
 Institute of Plant Genetics  
 60-479 Strzeszynska 34  
 Poznan, Poland  
 Voice telephone: 48-61-233-511  
 FAX telephone: 48-61-221-122  
 LUPINUS (GERMPLASM)  
 LUPINUS (LINKAGE MAPS OF  
 MOLECULAR MARKERS)  
 PISUM (GERMPLASM)  
 PISUM (ISOZYMES IN CORE GERMPLASM  
 COLLECTIONS)

Dr. Andrej K. Sytin

Herbarium

V.L. Komarov Botanical Institute

197376, Prof. Popov Street, 2

St. Petersburg 197346, Russia

ASTRAGALUS (FORMER USSR)

OXYTROPIS (FORMER USSR)

Dr. A. T. Szabó

University of Western Hungary

Berzsenyi College, Botany, LEGEC

Szombathely H-9701 P.O.B. 170, Hungary

Voice telephone: 36-94-313-892

Electronic mail: h1795sza@ellahu

FABACEAE (DATABASES FOR GERMPLASM  
AND DINITROGEN FIXATION)

TRIFOLIUM (POLYPLOID EVOLUTION)

TRIFOLIUM SECT. STENOSTOMUM

TRIFOLIUM PANNONICUM

Dr. Greg Tanner

CSIRO, Division of Plant Industry

G.P.O. Box 1600

Canberra, A.C.T., 2601, Australia

Voice telephone: 062-465044

FAX telephone: 062-473785

Electronic mail: gregt@oican.oz.au@uunet.uu.net

FABACEAE (FORAGE LEGUME  
FLAVONOIDS)

FABACEAE (FORAGE LEGUME TANNINS)

Dr. Tamara E. Teplyakova

SPTU-256, dom 4, k. 31

Razmetelevo 188686

Vsevolozhsk Distr.

Leningrad Region, Russia

Voice telephone: 218-81-11

GLYCINE MAX

Dr. Mary D. Tindale

Royal Botanic Gardens

Sydney, N.S.W. 2000, Australia

Voice telephone: 02-231-8111

FAX telephone: 02-251-7231

ACACIA (AUSTRALIA)

GLYCINE

Prof. Johannes Van Staden

NU Research Unit Pl. Growth & Develop.

Department of Botany, Natal University

P.O. Box 375

Pietermaritzburg 3200, Republic of South Africa

Voice telephone: 0331-955-130/0331-955-131

FAX telephone: 0331-69074

FABACEAE (SEED COAT IN  
GERMINATION)

Dr. Thierry Vanderborght

Jardin Botanique National de Belgique

Domaine de Bouchout

B-1860 Meise, Belgium

FAX telephone: 32-2-270-1567

PHASEOLUS (GERMPLASM)

VIGNA (GERMPLASM)

Ing.Agr. Ricardo Vanni

Instituto de Botánica del Nordeste

Sargento Cabral 2131

Casilla de Correo 209

3400 Corrientes, Argentina

Voice telephone: 07-83-27-309

FAX telephone: 07-83-27-131

FABACEAE (NORTHEAST ARGENTINA)

M.Bot. Angela Matriá S. da F. Vaz

Jardim Botânico do Rio de Janeiro

Setor de Botânica Sistemática

Rua Pacheco Leão, 915

22.460 Rio de Janeiro, R. J., Brazil

Voice telephone: 021-511-2588/021-511-2749

FAX telephone: 021-294-6590

Electronic mail: 213-3623

BAUHINIA (BRAZIL, CHECKLIST)

BAUHINIA (CENTRAL-WESTERN BRAZIL)

BAUHINIA (RIO DE JANEIRO, BRAZIL)

BAUHINIA SECT. CAULOTRETUS (BRAZIL)

BAUHINIA SECT. SCHNELLA (BRAZIL)

Elizabeth Ann Veasey

Rua M. Ferraz de Arruda Campos, 302/33

Bairro dos Alemães

13.417-120 Piracicaba, São Paulo, Brazil

SESBANIA (GENETIC VARIABILITY)

V. Vereshchagina

Perm University, Department of Botany

Bukirev Street 15

614600 Perm, GSP, Russia

MEDICAGO (PERENNIAL SPECIES,

REPRODUCTIVE BIOLOGY)

Lic. Alejandra Elena Vilela

Av. Las Heras 3893 5ºA

1425 Buenos Aires, Argentina

Voice telephone: 54-1-801-8279

FAX telephone: 54-1-49-8840

Electronic mail: vilela@spvasc.edu.ar [Internet]

PROSOPIS (LEAF ANATOMY)

- V.V. Vorontchikhin  
 Department of Plant Physiology  
 Biological Faculty, Moscow State Univ.  
 Moscow, 119899, Russia  
 Voice telephone: 939-21-18  
 CICER (SEED ANATOMY,  
 ULTRASTRUCTURE)  
 CORONILLA (SEED ANATOMY,  
 ULTRASTRUCTURE)  
 VICIA (SEED ANATOMY,  
 ULTRASTRUCTURE)
- Mrs. Dilmani Warnasuriya  
 OIC, Information Service  
 363, Baudhaloka Mawatha  
 Colombo 07, Sri Lanka  
 Voice telephone: 698-624/693-807  
 FAX telephone: 94-1-686-567  
 Electronic mail: dilmani@cisir.ac.lk [Internet]  
 FABACEAE (LIBRARY)
- Prof. Juergen K. P. Weder  
 Institut f. Lebensmittelchemie  
 Technische Universität München  
 Lichtenbergstr.4, D-85748 Garching, Germany  
 Voice telephone: 089-320-93266  
 FAX telephone: 089-320-94183  
 FABACEAE (PROTEASES)  
 FABACEAE (PROTEASE INHIBITORS)  
 LENS CULINARIS (TRYPSIN-CHYMOTRYPSIN  
 INHIBITOR)
- Dr. George White  
 USDA/ARS/NGRL  
 Bldg. 003, Rm. 409, BARC-West  
 10300 Baltimore Avenue  
 Beltsville, Maryland 20705-2350 USA  
 Voice telephone: 301-504-5328  
 FAX telephone: 301-504-6305  
 FABACEAE (GERMPLASM)
- Dr. John H. Wiersema  
 USDA/ARS, SB&ML,  
 Rm. 304, Bldg. 011A, BARC-West  
 10300 Baltimore Avenue  
 Beltsville, Maryland 20705-2350 USA  
 Voice telephone: 301-504-9181  
 FAX telephone: 301-504-5810  
 Electronic mail: SBMLJW@SOL.ARS-  
 GRIN.GOV [Internet]  
 FABACEAE (BEAN BAG, CO-EDITOR)  
 FABACEAE (NOMENCLATURE)
- Dr. David E. Williams  
 USDA/ARS/NGRL

- Rm. 400, Bldg. 003, BARC-West  
 10300 Baltimore Avenue  
 Beltsville, Maryland 20705-2350 USA  
 Voice telephone: 301-504-6310  
 FAX telephone: 301-504-6305  
 ARACHIS (GERMPLASM)
- Dr. Martin F. Wojciechowski  
 University of Arizona  
 Dept. of Ecol. & Evolutionary Biology  
 Tucson, Arizona 85721 USA  
 Voice telephone: 602-621-9643  
 FAX telephone: 602-621-9190  
 Electronic mail: loco@ccit.arizona.edu [Internet]  
 ASTRAGALUS (MOLECULAR BIOLOGY)  
 ASTRAGALUS (MORPHOLOGY)  
 ASTRAGALUS (NEW WORLD)  
 ASTRAGALUS (PHYLOGENETICS)  
 OXYTROPIS (NEW WORLD)  
 OXYTROPIS (PHYLOGENETICS)
- Mr. Alfredo Wong-León  
 Departamento de Botánica  
 Instituto de Biología  
 Apartado Postal 70-233  
 C.P.04510 C.U. Del. Coyoacán, Mexico, DF,  
 Mexico  
 Voice telephone: 622-5692  
 FAX telephone: 525-550-1760  
 Electronic mail: wong@redvax1.dgsca.unam.mx  
 [Internet]  
 PHASEOLUS (MORPHOMETRY)
- Prof. Zheng-Yi Wu  
 Depart. of Plant Systematics & Phytog.  
 Kunming Inst. Bot., Academia Sinica  
 Kunming, Yunnan 650204, People's Republic of  
 China  
 Voice telephone: 871-515-0660 Extension: 3524  
 FAX telephone: 871-515-0227  
 Electronic mail: 2784 Kunming  
 FABACEAE (YUNNAN)
- Prof. Gennadi P. Yakovlev  
 Popov Street, 14  
 Chemical-Pharmaceutical Institute  
 197022 St. Petersburg, Russia  
 Voice telephone: 812-234-57-29  
 FAX telephone: 812-234-60-44  
 Electronic mail: alex@pharm.spb.su [Internet]  
 SOPHOREAE (FORMER USSR, CENTRAL  
 ASIA)  
 FABACEAE (FORMER USSR, CENTRAL  
 ASIA)

Dr. Elisabeth Zindler-Frank  
Biologie  
Universität Konstanz  
P.O. Box  
D-78434 Konstanz, Germany  
Voice telephone: 49-7531-882104  
FAX telephone: 49-7531-883042  
CANAVALLIA (CRYSTAL IDIOBLASTS)  
PHASEOLUS (CRYSTAL IDIOBLASTS)

Svetlana A. Zymnitskaya  
Department of Botany and Ecology  
Biological Faculty, University  
Pz. Lenina, 51  
Ekaterinburg 620083, Russia  
Voice telephone: 3434-220-548  
TRIFOLIUM (EMBRYOLOGY)

Addendum:

Ing.Agr. César Augusto Bianco  
Facultad de Agronomía y Veterinaria  
Botánica Sistemática  
Estafeta Postal N° 9 580 Río Cuarto  
Córdoba, Argentina  
FABACEAE (CORDOBA, ARGENTINA)  
Voice tepehone: 0586-33858  
FAX telephone: 0586-45980

