

## VIII Meeting of the Latin American Association for Cotton Research and Development

Asunción, Paraguay, November 26-29, 2001

### Introduction

Cotton researchers from the South American region decided to form an association in 1986. The Latin American Association for Cotton Research and Development (ALIDA) was created in Sáenz Peña, Argentina in 1986 with the objective of exchanging information through regular meetings. Since then, ALIDA meetings have been held almost every other year. Argentina has hosted two meetings, in 1986 and 1997, while Perú, Brazil, Colombia, Nicaragua and Bolivia have hosted one meeting each in 1988, 1991, 1993, 1995 and 1999, respectively. At the invitation of the Ministry of Agriculture and Livestock, Government of Paraguay, the 8<sup>th</sup> Meeting of ALIDA was held in Asunción, Paraguay from November 26-29, 2001. The National Project for the Reactivation of Cotton (NPCR), a technical branch of the Ministry of Agriculture and Livestock (MAG), served as the primary host of the meeting.

In addition to the Ministry of Agriculture and Livestock of Paraguay, the Food and Agriculture Organization of the United Nations (FAO), the International Cotton Advisory Committee and many private companies also sponsored the meeting. All cotton producing countries in the region were invited to attend. Eight countries sent their representatives to participate in the meeting. Representatives of CIRAD-CA of France, FAO and the ICAC attended the meeting. A large number of people from the private sector actively participated in the deliberations. In total, one hundred and eleven people registered for the meeting. The list of participants is attached.

Over twenty papers were presented in two days on various aspects of cotton production research and marketing.

The Minister of Agriculture and Livestock, Mr. Pedro Lino Morel, remarked in the opening ceremony that the economy and social structure of Paraguay mainly depend on the work and revenues of more than 150,000 rural families who cultivate cotton. Cotton growers comprise close to 50% of the total peasants in the country. Obviously, the current low prices that prevail in the world textile market outline big challenges for all links of the cotton chain, from the producer to the exporter and the industry, without excluding the technical and financial agencies. However, and despite the setbacks, it has been categorically demonstrated that cotton production continues to be an irreplaceable item in the Paraguayan model of family agriculture, because instead of abandoning cotton growers, the national government has resolved to support and strengthen cotton production as far as conditions in the world market allow. The Minister said that the Paraguayan government continues to grant high priority to cotton and, thanks to the spirit of encouraging authentic solidarity, the ALIDA forum will serve as a means to generate strategies and types of appropriate cooperation to successfully face the critical moment that burdens cotton in every country and region.

Mr. Morel said that cotton growers in Paraguay are currently faced with three main problems: poor soil fertility, lack of suitable varieties and pest problems. Deltapine varieties, introduced in Paraguay in the early 1990s, initially proved very successful. Increases in yields were attributed to the high quality and high yielding ability of Deltapine seed. But problems soon developed and growers in Paraguay do not use Deltapine varieties now. Regarding pests, fusarium wilt, Alabama cotton leaf worm *Alabama argillacea*, and boll weevil *Anthonomus grandis*

are the most prevalent. Boll weevil is responsible for heavy yield losses. Early planting may reduce such losses, but late planting poses a high risk. On average, each farmer owns 2.2 hectares, and all cotton growers are provided a free "boll weevil attract and kill tube" by the government. The problem with Alabama is that it has developed resistance to insecticides, particularly pyrethroids. However, cotton growers in Paraguay still believe in cotton production, and the future of cotton in Paraguay depends on international prices.

On behalf of ICAC, Mr. Carlos Valderrama welcomed participants to the 8<sup>th</sup> ALIDA Meeting. Mr. Valderrama mentioned that Paraguay has been an active and important member of the ICAC and that the country successfully participated in a 5-year project on boll weevil control financed by the Common Fund for Commodities (CFC). In reference to the world cotton economy, Mr. Valderrama noted that international cotton prices had reached a 27-year low in October 2001 and that subsidies offered by some countries, new area dedicated to cotton, new technologies, and currency devaluation in some countries have resulted in a rapid increase in world supplies, pushing prices downward. He said that prices would not be low forever and that it was necessary to prepare for higher prices in the future.

The two-day paper presentation program was divided into four sessions: Production, Marketing and Research; Varieties and Seed Market; Farmers and Research; and Integrated Pest Management. Summaries of presentations and the main observations are given below.

## **First Session: Production, Marketing and Research**

Presentations from the participating countries visualized that the cotton sector in most countries is facing difficulties due to low international prices rather than to domestic problems. International cotton prices are the lowest in many years and this seriously affects the economics of growing cotton without relief from high costs of production.

Lower production and continued increases in local consumption have converted some traditional producing and exporting countries in the region, such as Perú, into importing countries. Growing imports of fiber are necessary to satisfy industrial raw material needs.

From an analysis of world statistics on production, consumption and final stocks, it is observed that the current crisis due to low international prices cannot be attributed to fluctuations in global quantities but to distortions of the market caused by direct and indirect subsidies applied to production in the industrialized countries.

Direct subsidies to cotton production and trade cause great harm to growers worldwide. The International Cotton Advisory Committee has discussed the issue of direct financial support in producing countries at various meetings. At the last plenary meeting held in Zimbabwe from September 16-21, 2001, member

governments decided to create a working group to discuss government measures and identify strategies to reduce and eventually eliminate the negative effects caused by direct subsidies to cotton production and trade. The group will outline solutions to this problem so that practices harmful to cotton's international trade can be minimized, if not eliminated.

As an answer to low international cotton prices, more and more countries are modernizing their production practices based on the latest technical developments, and they are trying to find ways to reduce direct costs of production. More efficient production practices are a key to lowering production costs and improving cotton economics.

Brazil is revitalizing its agro-industrial sector pointing at the whole chain of the textile production industry. With regard to quality, poor ginning was identified as one of the weakest links. Recently, Brazil started a school for training ginning technicians. Such a facility was not previously available in the region. The facility is open to other countries in the region at a nominal tuition fee. The school is expected to improve the current work force, anticipate future training needs of the industry, and provide trained manpower for the ginning industry in Brazil and in the surrounding area.

A systemic vision of the production sector was discussed in the meeting. It was emphasized, for example, that integrated pest management (IPM), together with other analysis or means to approach the decisions to be taken, such as the Geographical Information System (GIS), macroeconomic policies, extension, etc., should be considered as a strategic point to find solutions to main problems in cotton production.

## **Second Session: Varieties and Seed Market**

Cotton production took off in Paraguay in the early 1970s. A bacterial blight resistant variety, Reba B-50, dominated the industry until 1990. A number of varieties have been tried from many countries, particularly in the last ten years. Paraguay has not been able to develop its own variety so far. If adopted on large areas, IAN 338 will be the first locally developed variety grown on a commercial scale in Paraguay.

Colombia continues to depend on varieties developed elsewhere, particularly in the USA. Deltapine varieties were grown on almost 100% of the area during 2001/02, mainly DP 5415, planted on almost 70% of the total area. Other popular varieties grown in Colombia on 5-15% of the total area are DP 90, DP 50, DP 5414 and DHS.

Argentina and Brazil have their own strong breeding programs. Argentinean varieties have been tried on a large scale in other countries, including Paraguay. The variety development process has been slow in Perú due to differences in the types of varieties required to meet growing needs in the five production regions. The three main types of varieties required are Del Cerro, Pima and Tanguis.

The private sector has grabbed a significant portion of the cottonseed industry in Brazil. Varieties developed by the Empresa Brasileira de Pesquisa Agropecuária-EMBRAPA (Brazilian Enterprise of Agricultural Research) were grown on only 10% of the total area in 2001/02. The private sector is very active in Brazil and its contribution to the variety development process is significant.

Every country in the region can choose from a list of varieties with excellent technological qualities and great diversity of agronomic adaptations for planting every year. The work on variety development, and the genetic material acquired from other countries, which is available for production, shows the importance and achievements made in genetic improvement in various countries. However, it was pointed out that recent changes in the seed industry in the form of introduction of genetically engineered varieties demand higher participation of the private sector in seed production and distribution to cotton growers.

There was a cautious warning with regard to biotechnological approaches to the improvement of cotton, particularly the use of transgenic varieties. Papers presented showed great benefits in the use of genetic engineering, but underlined the fact that researchers must elucidate the useful aspects of this technology to the public in order to avoid any rejection of biotech products by consumers. It was recognized that the technology could contribute a number of potential benefits to the environment and animal and human health.

With greater involvement of the private sector in variety development, seed production and development of genetically engineered varieties, rigorous implementation of intellectual property rights in agricultural production has become more important. Countries that intend to follow the path of private sector participation in the development of technologies and products for direct use by farmers need to have an in-house framework of assurance that developments from the private sector will belong to the private sector and that there will be a legal framework for their commercial use in each country. The private sector may not be able to invest in today's agro-industrial competitive world with much confidence without such an assurance.

### **Third Session: Farmers and Research**

Countries in the region share a common concern regarding more efficient application of the process of dissemination of the available technologies for increasing productivity in cotton. Countries represented in the meeting noticed the limited use of recommendations by producers, especially in those countries where small growers form the bulk of the farming community.

In Paraguay, the official Agricultural Extension Service is expanding its scope with the participation of the Unidades Técnicas Tercerizadas (UTT). In a management and soil conservation project, the gender focus and the participation of the

private sector have been shown to increase the adoption of the technology, particularly with respect to minimum tillage or no till, crop rotation and the use of green manure fertilization.

Credits granted to producers by Cooperativa Coronel Oviedo in one of the main regions of Paraguay are conditioned on protection of natural soil resources, production of items of self-consumption, and breeding of small animals, with the objective of assuring the adoption of technologies.

An experience of participative research was presented where producers collaborated actively with specialists in the definition of the most advantageous varieties for their agro-ecological conditions (Department of Ñeembucú). This seems to be an alternative that can contribute to increase technology adoption in cotton cultivation. This methodology has been successful in other places applied to food items and of self-consumption with small farmers.

### **Fourth Session: Integrated Pest Management (IPM)**

More and more consensus exists on the need to stimulate the application of all the methodologies that comprise IPM: genetic improvement; cultural and agronomic practices; pest monitoring and natural enemies; and application of selective pesticides; in order to achieve "an integrated cultivation management" for avoiding or reducing the use of pesticides that unnecessarily contaminate the environment.

The tri-national project "Integrated Pest Management of the Cotton Boll Weevil in Argentina, Brazil and Paraguay" resulted in very useful information on the biology, ecology and management of the cotton boll weevil in the region. The project was sponsored by the International Cotton Advisory Committee and funded by the Common Fund for Commodities, an international intergovernmental organization based in Amsterdam, Netherlands.

### **Recommendations and Final Comments**

In the final session, the outgoing President of ALIDA, Mr. Juan Campero Rojas from Bolivia, once again raised the issue of direct subsidies. He stated that direct subsidies to production and to cotton trade cause great damage to producers in many countries worldwide. The representative of the ICAC repeated that member governments of the ICAC are actively discussing the issue.

Speakers reiterated the fact that the boll weevil is a major common enemy of cotton in the region. It was suggested that the three countries involved in the tri-national project must make extra efforts for maximum diffusion of the results obtained, in order to achieve more significant effects in the fight against this harmful insect.

It was also proposed that such multinational projects should continue with an enlarged focus and inclusion of more coun-

tries like Bolivia and others affected by the boll weevil in the region.

Bt cotton is currently grown on a commercial scale only in Argentina. A number of countries in the region have yet to complete formalities for proper introduction and adoption of genetically engineered cotton varieties. Some participants suggested that governments should solve the problem of restrictions that limit farmers' access to the use of new technologies, like Bt cotton.

The ICAC's viewpoint on genetic engineering of cotton was made clear at the meeting. The technology has tremendous applications in agriculture but should be used carefully. Since the appearance of transgenic cotton, over ten years ago, the ICAC Secretariat has published many reports on various aspects of biotechnology, commissioned two extensive review articles (one published and the second in process), and constituted an expert panel that also prepared a report for the ICAC. Biotechnology with reference to currently available genetically engineered varieties also has been discussed at plenary meetings of the ICAC. ICAC has put together all these papers/reports on the ICAC web page at <http://www.icac.org>. All publications on this subject, except review articles, can be accessed free of charge.

The meeting also observed that the private sector is an integral part of the cotton production and processing chain. It is important that the issues confronted by various sectors of the industry are tackled jointly. The meeting decided that new developments and improvements in the existing technologies would be discussed at the next meeting of ALIDA.

A representative of the Ministry of Agriculture, Livestock and Supplies of the Government of Brazil offered to host the 9<sup>th</sup> meeting of ALIDA in Brazil in 2003, and the meeting accepted the invitation.

In order to keep communications alive in the interim, the ICAC representative reminded participants to use the ICAC electronic mailing list. It is a free service, and messages can be posted at "ALIDA List" [alida@liststar.icac.org](mailto:alida@liststar.icac.org).

The meeting urged governments present to strengthen the primary sector, especially cotton cultivation, with genuine and non-distorting economic measures in their countries.

The government of Paraguay proposed Agr. Eng. Ubaldo Tadeo Britos, Technical Coordinator of the National Project for the Reactivation of Cotton (NPCR) as the new president of ALIDA. The meeting unanimously elected Mr. Britos as the 8<sup>th</sup> President of ALIDA for the period until the meeting in Brazil in 2003. Mr. Britos can be contacted at the following address:

Ing. Agr. Ubaldo Tadeo Britos  
Technical Coordinator  
National Project for the Reactivation of Cotton (NPCR)  
Ministry of Agriculture and Livestock  
Asunción, Paraguay  
Telephone and fax: 595-21- 446394  
Emails: <[tbritos@hotmail.com](mailto:tbritos@hotmail.com)>, <[pnra@quanta.com.py](mailto:pnra@quanta.com.py)>

### List of Participants

#### Argentina

Hugo Adolfo Brodsky  
[wcasewssa@impsat1.com.ar](mailto:wcasewssa@impsat1.com.ar)  
Gladys Beatriz Contreras  
Instituto Nacional de Tecnología Agrop.  
[gcontreras@saenzpe.inta.gov.ar](mailto:gcontreras@saenzpe.inta.gov.ar)  
Luis Ernesto Erazzu  
Instituto Nacional de Tecnología Agrop.  
[lerazzu@correo.inta.gov.ar](mailto:lerazzu@correo.inta.gov.ar)  
Ivan Bonacic Kresic  
Fitopatología  
[ibonacic@saenzpe.inta.gov.ar](mailto:ibonacic@saenzpe.inta.gov.ar)  
Marcelo Daniel Labarta  
Secretaría de Agricultura  
[mlabar@saqyp.mecom.gov.ar](mailto:mlabar@saqyp.mecom.gov.ar)  
Alex Montenegro  
Instituto Nacional de Tecnología Agrop.  
[montenegroalex@saenzpe.inta.gov.ar](mailto:montenegroalex@saenzpe.inta.gov.ar)  
Juan Alberto Poisson  
Instituto Nacional de Tecnología Agrop.  
[jpoisson@saenzp.inta.pov.ar](mailto:jpoisson@saenzp.inta.pov.ar)  
Carlos Enrique Ramírez

Servicio Nacional de Sanidad y Calidad Agroal.  
[carlramirez@wnet.com.ar](mailto:carlramirez@wnet.com.ar)

Aldo Angel Ricciardi  
Instituto Nacional de Tecnología Agrop.  
[aricciardi@saenzpe.inta.gov.ar](mailto:aricciardi@saenzpe.inta.gov.ar)

Teodoro Stadler  
Servicio Nacional de Sanidad y Calidad Agroal.  
[picudo@realynet2.com.ar](mailto:picudo@realynet2.com.ar)

Guillermo Waldino Videla  
Monsanto  
[guillermo.w.videla@laz.monsanto.com](mailto:guillermo.w.videla@laz.monsanto.com)

#### Bolivia

Juan Campero Rojas  
Asociación Nacional de Productores de Algodón  
[adepa@cotas.com.bo](mailto:adepa@cotas.com.bo)

#### Brazil

Isaura Lopes Ferreira  
Servicio Nacional de Aprendizaje Industrial  
Centro de Tecnología de Industria Química Textil  
[ilopez@cetiqt.senai.br](mailto:ilopez@cetiqt.senai.br)  
Roberto Proença Passarinho  
Ministerio de Agricultura

[rpasarinho@agricultura.gov.br](mailto:rpasarinho@agricultura.gov.br)

Emerson B. P. Quereza  
Uberlandia - Mg  
[emersonquereza@mdm-algodao.com.br](mailto:emersonquereza@mdm-algodao.com.br)

Carlos Schlottfeldt  
ASBRAER, FAO-Proyecto TCP  
[Cabisc@linkexpress.com.br](mailto:Cabisc@linkexpress.com.br)

Marcos Stamm  
Ministerio de Agricultura  
[stammr@vol.com.br](mailto:stammr@vol.com.br)

#### Colombia

Jorge Cadena Torres  
Corporación Colombiana de Investig.  
Agropecuaria  
[jcadena@corpoica.org.co](mailto:jcadena@corpoica.org.co)

Luis Fernando Vanegas  
Minerales S.A.  
[exclusivit@volpremium.net.co](mailto:exclusivit@volpremium.net.co)

#### France

Christopher Heraudeau  
Promocion Alternat  
[sepa@jaramail.com.py](mailto:sepa@jaramail.com.py)

**Nicaragua**

Mario Vaughan  
Consejero  
mav@tmx.com.ni

**Paraguay**

Hugo Cesar Acosta  
Dirección de Semillas  
Ministerio de Agricultura  
acoshugo@hotmail.com

Francisco Acosta Miranda  
Empresa Oro Cuí S.A.  
facosta@ecomtrading.com

Nidia Alvarenga  
Oficina Fiscalizadora de Algodón y Tabaco  
Ministerio de Agricultura y Ganadería  
Tel: 204632

Mario Gustavo Aquino  
Censo y Estad. Agrop.  
Arsenales del Chaco y Ciencias Veterinarias  
mgaquinoc@yahoo.com

Porfirio Domingo Arevalos  
Dermasur  
darevalo@telesurf.com.py

Luis Enrique Arrellaga  
Golondrina S.A.  
carrellaga@gesgolondrina.com.py

Nelson Ayala  
Prodesal  
Tel: 496416/19

Lorenzo Benítez  
Ministerio de Agricultura y Ganadería  
dia@quanta.com.py

Rosita Benitez Portillo  
Ministerio de Agricultura y Ganadería  
Tel: 0511-2549

Cándido Bogado  
Dirección de Extensión Agraria  
Ministerio de Agricultura y Ganadería  
Tel: 021582526

Ubaldo Tadeo Britos  
Programa Nac. de Reactivación del Algodón  
Ministerio de Agricultura y Ganadería  
tbritos@hotmail.com.py

Cesar Caballero  
Tel: 021574537

Saul Hugo Caballero Quiñonez  
Cámara Algodonera del Paraguay  
cadelpa@conexión.com.py

Emeterio Cáceres Barrios  
Ñeembucú

Oscar Vicente Cáceres Rivas  
Empresa Oro Cuí S.A.  
Fax: 021202197

Enrique Cadogan  
Secretaría Técnica de Planificación

cad@rieder.net.py

Milner Fidel Cardozo  
Dirección de Extensión Agraria  
Ministerio de Agricultura y Ganadería  
Tel: 021583577

Horacio Centrón  
Fac. Ciencias Agrarias  
hcentron@uninet.com.py

Cirilo Centurión  
Programa de Reactivación del Algodón  
Ministerio de Agricultura y Ganadería  
cirilocenturion@hotmail.com

Juan Carlos Cousiño  
Ministerio de Agricultura y Ganadería  
Tel: 05112119

Rafael Maximiano Delgado  
Instituto Agronómico Nacional  
rafadelgado@yahoo.com

Carlos Duarte  
Banco Nacional de Fomento  
Tel: 08630494

Juan Francisco Escobar  
Oficina Fiscalizadora de Algodón y Tabaco  
Ministerio de Agricultura  
Tel: 204676

Juan Carlos Estigarribia Morales  
Dirección de Extensión Agraria  
Ministerio de Agricultura y Ganadería  
Tel: 021583577

José Anfibal Fariña  
Instituto Agronómico Nacional  
Tel: 05112119

Cynthia Carolina Ferreira G.  
Unidad Técnica Ejecutora de Proyectos  
Ministerio de Agricultura y Ganadería  
cyncaro@yahoo.com

Zunilda Funes  
Comercialización  
zunifunes@yahoo.com.py

Pablino Galarza  
Oficina Fiscalizadora de Algodón y Tabaco  
Ministerio de Agricultura  
Teléfono: 021223222

Modesto Gamarra Giménez  
Golondrina S.A.  
emgamara@gesgolondrina.com.py

Dolia Melania Garcete  
Dirección de Semillas  
Ministerio de Agricultura  
doli-garcete@latinmail.com

Edith Gómez  
Dirección de Extensión Agraria  
Ministerio de Agricultura y Ganadería  
Fax: 021585102

Graciela Gómez  
Ministerio de Agricultura y Ganadería

graciela@telesurf.com.py

Julia Giménez Cabrera  
Instituto Agronómico Nacional  
Tel: 05112225

Alicia González  
Instituto Agronómico Nacional  
Tel: 05112225

Albin Header G.  
Coop. Chortizer C  
Tel: 09182301

Augusto Ingolotti  
Plato Industries  
platopy@telesurf.com.py

Carlos Jara Alonso  
Oficina Fiscalizadora de Algodón y Tabaco  
Ministerio de Agricultura y Ganadería  
Tel: 021227090

Miguel Angel Ken Moriya  
Dirección de Extensión Agraria  
Ministerio de Agricultura y Ganadería  
gtzsuelo@cuanta.com.py

Nery Gustavo Kennedy  
Plato Industries  
platopy@telesurf.com.py

Agustín Marcial Lajarthe C.  
Facultad de Ciencias Agrarias  
bib.agr@sce.cnc.una.py

María Zulvy Vargas de Leiva  
Prodesal  
Teléfono: 021583577

Edgar Lorenzo López  
Ddv

Luis Dario López Davalos  
Dirección de Semillas  
Ministerio de Agricultura  
lucelope@telesurf.com.py

Antoliano López Portillo  
Dincap  
rodesal@conexión.com

Vicente Magnano  
vmagnano@telesurf.com.py

Carolina Mallada Martínez  
Unidad Técnica Ejecutora de Proyectos  
Ministerio de Agricultura y Ganadería  
c-mallada@yahoo.com

Lelis Bedoya de Martínez  
Instituto Agronómico Nacional  
Tel: 05112225

Ezequiel Medina Cristaldo  
Empresa Oro Cuí S.A.  
emedina@emcontrading.com

Carlos Modesto Mena  
Oficina Fiscalizadora de Algodón y Tabaco  
Ministerio de Agricultura y Ganadería  
Tel: 021227090

Martina Rosa Vera de Mercado  
Censo y Estad. Agrop.  
Tel: 512700

María Estela Ojeda  
Dirección de Semillas  
Ministerio de Agricultura y Ganadería  
ma\_estelaojeda@hotmail.com

Daniel Ortiz  
Proyecto Akarapua  
Tel: 052242622

José Paiva  
Dirección de Semillas  
Ministerio de Agricultura  
disemag@hotmail.com

Carlos Pfingst  
carlosap@telemail.com.py

Leoncio Quintana  
Dirección de Extensión Agraria  
Ministerio de Agricultura y Ganadería  
Tel: 021585210

Hugo Rabery Cáceres  
Facultad de Ciencias Agrarias  
bib.agro@una.py

José María Ramírez Villar  
Empresa Oro Cuf S.A.  
Tel: 047553

Luis Enrique Resquin  
Comercialización  
Teléfono: 5690352

Daniel Roa Duarte  
Comercialización  
roapedro@hotmail.com

Gerardo Rojas Almada  
Prodesal  
Tel: 450890

Alcides Gil Rotela Zaracho  
Prodesal  
econ-demagc@telersurf.com.py

Luis Alfredo Ruiz Díaz  
Dirección de Educación Agraria  
Ministerio de Agricultura  
Tel: 021585691/2

Lino Ariste Saavedra  
Empresa Oro Cuf S.A.  
Tel: 071202860

Carlos Ramón Samaniego  
Banco Nacional de Fomento  
csamaniego10@hotmail.com

Jacinto Sánchez  
Banco Nacional de Fomento  
Tel: 0322207

Gustavo Adolfo Sánchez León  
Empresa Oro Cuf S.A.  
gsanchez-oc@hotmail.com

Ramón Santacruz Ortiz  
Empresa Oro Cuf S.A.  
Tel: 064422057/58

Victor Manuel Santander  
Ministerio de Agricultura y Ganadería  
dia@quanta.com.py

Pedro Javier Seall  
C.P.S.A.F.  
pedrosea@rieder.net.py

Felix Arturo Stiegwardt  
Manufacturas Pilar S.A.  
felix@tct.com.py

Jorge Anibal Torres  
Oficina Fiscalizadora de Algodón y Tabaco  
Ministerio de Agricultura y Ganadería  
Tel: 021227090

Nuvia Valdez  
Planificación  
Tel: 021585691/2

Christopher Viot  
Ministerio de Agricultura  
viot@cirad.fr

#### **Peru**

Francklin Suárez  
Instituto Rural Peruano  
fsuarez@irvg.org

#### **USA**

Stacy Plato  
Plato Industries  
platopy@telesurf.com.py

Tom Plato  
Plato Industries  
platotom@lomail.com

#### **International Organizations**

##### *CIRAD*

Bernard Hau  
hau@cirad.fr

Pierre Silvie  
French Embassy  
silvie@cirad.fr

##### *European Union*

Michelle Pierre  
eplp33@hotmail.com

##### *International Cotton Advisory Committee*

Rafiq Chaudhry  
rafiq@icac.org

Carlos A. Valderrama  
carlosv@icac.org