

## **EXECUTIVE COMMITTEE**

Twenty-seventh Regular Meeting 15 - 17 May, 2007

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# INCREASED SUPPORT FOR FONTAGRO FROM IICA'S MEMBER STATES AND THE IDB

#### REGIONAL FUND FOR AGRICULTURAL TECHNOLOGY - FONTAGRO

#### INTRODUCTION

The Regional Fund for Agricultural Technology is a long-term mechanism for funding research and innovation for agriculture and the rural sector. It represents a joint effort by the countries of the region and strategic partners to build up the agricultural sector and improve the quality of life of rural dwellers through priority research and technical innovation activities. Its main activity revolves around three areas aimed at regional development: rural poverty alleviation, increased competitiveness of the sector and the rational management of natural resources as the mainstay for production.

FONTAGRO has had significant achievements with financial contributions to research. It has also produced results for the rural sector on which it has had a genuine impact. It has successfully raised additional resources from other agencies that share its vision and it promotes and facilitates the spread and use of knowledge through its new web site (www.fontagro.org)

Since it was created in 1998, the Fund has been sponsored and supported by the Inter-American Institute for Cooperation on Agriculture (IICA) and the Inter-American Development Bank (IDB). The purpose of this document is to report to the Executive Committee and to the Inter-American Board of Agriculture (IABA) on the scope and accomplishments of FONTAGRO and request their support in consolidating it.

#### BACKGROUND

Science and technology are a determining factor in the well-being of humanity. Insofar as the rural sector is concerned, science and technology have played an important role in alleviating poverty, increasing competitiveness and contributing to the sound management of natural resources, the mainstay for productive activity. Nonetheless, with few exceptions, the countries of Latin America and the Caribbean lag behind those of other regions in terms of their ability and willingness to invest in this field.

According to a recent report (IFPRI, 2006<sup>1</sup>), the region invests a mere 10.7% in agricultural research and development of the total amount invested worldwide. By way of comparison, Asia invests 32.7%. Latin America's and the Caribbean's share in the total amount invested in science and technology is a mere 2.9%. By way of comparison, Asia's share in the total is 13%. In terms of the intensity of agricultural research (dollars invested for each \$100 in agricultural product), the figures are also quite disparate: \$2.36 for developed countries and \$0.53 for developing countries. Furthermore, numerous studies --global and focusing on LAC-- reveal that investments in research on several agricultural products are highly profitable, with IRRs ranging from 25% to 110%.

Increasing regional investments in science and technology for the agricultural sector is justified because of the reasons explained above and also because of the growing interdependence of countries and the globalization of trade, which require economies of scale and scope and the pooling of capabilities. In other words, science and technology for the modern agricultural sector require close cooperation between countries and between sectors.

Pardey, P., N. Beintema, S. Dehmer and S. Wood. IFPRI. 2006. Agricultural Research: A Growing Global Divide? 29 p.

#### GENESIS AND DEVELOPMENT

The Fund was created as a long-term mechanism for supplementing the region's investments in science and technology for the agricultural sector. The Fund's priorities are keyed to strategic objectives identified by the countries of the region, which are to achieve the competitive and sustainable development of agriculture and contribute to the alleviation of poverty. As such, it uses the net income (interest) from capital provided by the member countries<sup>2</sup> to finance research consortiums working on priority topics that could represent an opportunity or a limitation for two or more countries. In other words, the Fund focuses on regional agendas. Each country designates a delegate or representative on the Steering Committee, which is responsible for making all of FONTAGRO's policy and strategic decisions, which are then implemented through the Technical Administrative Secretariat.

The Fund is one component in the region's institutional framework and, as such, coordinates and cooperates very closely with the national research and innovation systems, FORAGRO, the PROCIs, the private and academic sectors and the regional and international research centers (FORAGRO-IICA 1999).<sup>3</sup>

At the request of the countries themselves, the Fund's resources are administered by the IDB. The Bank, in turn, hosts the Fund's Technical Administrative Secretariat and provides technical, legal and administrative support.

IICA has played a decisive role in the creation, growth and consolidation of the Fund, providing human resources and political, technical and administrative support. Thanks to these contributions from IICA and the IDB, the Fund has been able to maintain a lean and effective administrative structure.

#### ACHIEVEMENTS, RESULTS AND IMPACT

FONTAGRO's contribution to the region's rural sector can be assessed from the standpoint of the increased impact of the institution and from the standpoint of the projects financed, as may be seen below:

#### **Institutional impact and achievements**

- Investment in science and technology for the rural sector. To date, contributions from the members total US\$37 million. With these and additional resources provided by other organizations that have a similar mission, the Fund has financed a total of 47 projects (See Annex 1), providing more than US\$12 million and generating counterpart contributions in excess of US\$22 million.
- Platform for raising additional resources. The Fund has served as a platform for facilitating the funding of science and technology, using other sources. The Special Call 2007 is a good example. The Fund contributes \$1 million, the Consultative Group on International Agricultural Research (CGIAR) contributes \$2 million, the Spanish Agency for International Cooperation (AECI) contributes \$0.5 million and the IDB contributes \$0.5 million.
- Knowledge management for stakeholders in the region. The critical importance of managing and disseminating the knowledge generated by the projects financed has been recognized by the Steering Committee and the countries of the region. Accordingly, the Fund has convened technical follow-up workshops to discuss and evaluate the results of and progress with each project. This information is systematically included on the new Web page (<a href="www.fontagro.org">www.fontagro.org</a>).

Argentina, Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela

Mateo N., Alarcón E., Ardila J., Moscadi E. La investigación Agropecuaria en ALC y la Paradoja de su financiamiento.IICA- FORAGRO/ST/03.1999 (Agricultural Research in LAC and the Paradox of its Financing).

#### Research and technological innovation projects financed by the Fund

- The variety and scope of research financed by FONTAGRO reflects the diverse priorities and interests of the region and includes headings and activities of relevance to various ecological zones. Annex 1 shows the complete list of projects financed, including the amounts and participating organizations.
- The results and potential impact of the research consortia financed by the Fund in the first call for proposals have been formally evaluated by a team of outside consultants under IICA's technical leadership (IICA, 2005)<sup>4</sup>, and the results are very positive. The study points to rates of return of 28.6% and a cost/benefit ratio of 1.0/3.3 for a sample of projects from the first call for proposals. The evaluation also makes a differentiation between results obtained with pre-competitive and competitive technologies and innovations.
- Table 1 below shows concrete examples of specific projects and the results and impact achieved.

PROJECT	CONSORTIUM	RESULTS AND IMPACT
Genetic characterization of Notophus (Lenga or White Oak)	Argentina, Chile	Analysis with molecular markers made it possible to identify and define priority areas for the conservation of Oak and Rauli.
Management of Smilax species (Sarsaparilla) in natural agroforestry ecosystems	Costa Rica, Nicaragua, CATIE	Taxonomical classification, asexual and <i>in vitro</i> reproduction and enrichment in agroforestry systems makes it possible to retrieve potentially high-value genetic material that has medicinal and other importance.
Embryogenesis in coffee	Nicaragua, Costa Rica, Honduras, El Salvador, PROMECAFE	Evaluation and selection of improved F1 seeds that are highly productive and resistant to diseases and pests facilitate the final development of superior varieties
Sanitary quality in aquaculture	Chile, Colombia, Venezuela	Significant progress in identifying and evaluating natural composts capable of enhancing the autoimmune capacity of high-value aquaculture species.
Research on extension in LAC	Argentina, Colombia, Costa Rica, IICA	Determination of policies, functions, competencies, target population and available resources. Creation of a network of researchers and an Internet page which are kept active.
Exotic Andean fruit trees	Ecuador, Colombia	Assessment of post-harvest management options for Capegooseberry, granadilla and tree tomato. Development of

IICA. Evaluation of the potential impact of projects financed by FONTAGRO – First Call for Proposals. Directorate of Technology and Innovation, IICA, 2005. 84 p.

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PROJECT	CONSORTIUM	RESULTS AND IMPACT
		processed raw material based on national and international market requirements.
Integrated pest management in citrus for compliance with international good agricultural practices	Chile and Peru	Identification of alternative products other than traditional insecticides and physical means for pest control. Introduction and evaluation of parasitoids for biological control.
Information and monitoring for risk assessment in agriculture	Uruguay and Paraguay	Development of a geographical information system (maps and databases) with information on risks in real time and simulation models with calibrated crops
Health of banana soils	Venezuela, Panama, Dominican Republic, Costa Rica, INIBAP	Project is still active. The aim is to propose alternative chemical, physical and biological management for banana cultivation. Significant initial achievement by involving –with no cost to the project- high-caliber European universities and the Department of Primary Industries of Australia

### JUSTIFICATION FOR SUPPORT REQUIRED FROM THE EXECUTIVE COMMITTEE AND THE IABA

In IICA's 2006-2010 MTP, the member countries acknowledge the strategic role technology and innovation play in bringing prosperity to rural populations in the hemisphere. Indeed, one of its priority lines of action is to strengthen hemispheric cooperation in technological innovation among countries, as is the case with FONTAGRO. Based on this framework, the initiative of the 14 countries (all members of IICA) to create and consolidate FONTAGRO is fully consistent with the vision and mission of the Institute.

For the region, FONTAGRO is an instrument with its own sustainable and long-term financial capacity to promote agriculture and rural development from the standpoint of research and innovation To achieve the full impact expected, the countries that currently comprise the Fund view as necessary and strategic the addition of other IICA Member States to the Fund's membership. They feel that having the unequivocal support of the Executive Committee and the IABA is extremely important if this aspiration is to become a reality.

FONTAGRO will thereby become a program that extends across the hemisphere and the strategic financial instrument for strengthening the capabilities and articulation of the institutional technological innovation systems, which, in the Americas, have a mission, which is to promote the development and introduction of the technologies required for the 21<sup>st</sup> century.

# ANNEX 1 FONTAGRO SUPPORTED PROJECTS

	Project number	FONTAGRO Short Title	Complete Project Title	Project Leaders	Institutions and Member Countries involved in the Consortium	Chief Researcher	Resources assigned by FONTAGRO- (USD)	Source
1	0604/0 6*	Managing pests in Irish potatoes native to the Andes.	Development and application of ecological practices in pest management to increase sustainable production of potatoes	CIP - Peru	INIAP – Ecuador; PROINPA - Bolivia	Dr. Jürgen Kroschel j.kruschel@cgiar.org Tel: (51-1) 349-6017 Peru	450,000	CGIAR
2	0617/0 6*	Durable disease resistance in barley	Identification and use of durable disease resistance in barley in Latin America.	Oriental Republic of Uruguay	ICARDS/CIMMYT-Mexico; U. Peruana Cayetano Heredia-Peru; INIA- Uruguay; Colegio de Posgraduados- Mexico; Cregon State University-EE UU	Ariel Julio Castro vontruch@fagro.edu.uy Tel: (598) 72-27950 Uruguay	484,500	FONTAGR O
3	060506	Plantain value chains	Strengthening of plantain value chains: technological innovation to reduce agrochemicals	CIAT - Colombia	FEDEPLATANO-Colombia; INIAP- Ecuador; Escuela Superior Politécnica del Litoral-Ecuador; INIA-Venezuela	Elizabeth Alvarez <u>ealvarez@cqiar.orq</u> Tel: (57-2) 4450000 Colombia	300,000	CGIAR
4	0616/0 6*	Strengthening of <i>naranjilla</i> and berry chains	Competitive producers of naranjilla and berries through the participative selection of superior clones, integrated farm management and strengthening of value chain	CIAT- Colombia	CORPOICA -Colombia; U. Nacional de Colombia-Colombia; AGROSUR- Colombia; INIAP-Ecuador	Alonso González <u>a.gonzalez@cgiar.org</u> Tel: (57-2) 4450056	478,555	FONTAGR O
5	0608/0 6*	Rice resistant to imidazolinones	Environmental impact of adopting rice resistant to imidazolinones in contrasting productive systems in Latin America.	INIA-Uruguay	U. Central de Venezuela,-Venezuela; CIAT-Colombia	Nestor Saldain nsaldain@inia.org.uy Tel: (598)452203/1210 Uruguay	420,000	CGIAR
6	308/05	Agroforestry- livestock Systems	Options for linking market opportunities and technological innovation to Agroforestry-livestock systems in coffeegrowing areas of Colombia, Costa Rica and Nicaragua.	CATIE	Univ. Caldas, Centro de Investigaciones del Café – Colombia: Inst. de Desarrollo Agrario, Inst. del Café de Costa Rica, MAG – Costa Rica; Univ. Centroamericana - Nicaragua	Dr. Muhammad Ibrahim mibrahim@catie.ac.cr Tel: 5582595/ 5566418 Fax: (506) 556-1891 Costa Rica	290,970	FONTAGR O
7	311/05	Mite-fungus- bacteria disease complex in rice	Managing mite-fungus bacteria disease complex , a new challenge for Central American rice farmers	IDIAP - Panama	CIAT – Colombia; Corporación Nacional Arrocera, Semilla Nuevo Milenio – Costa Rica; Univ. Centroamericana – Nicaragua	Ismael Carnargo Bultrago <u>icarnargo@cwpanama.net</u> Tel: Panama	360,000	FONTAGR O
8	353/05	Innovation in native potatoes	Technological innovation and differentiated markets for native potato producers	INIAP - Ecuador	PROINPA – Bolivia; CORPOICA – Colombia; INIEA, Intermediate Technology Development Group (ITDG), CIP, IICA-PRODAR – Peru; INIA – Venezuela; PROCIANDINO	Ing. MSc. Iván Adolfo Reinoso Reinoso reinoso@fpapa.org.ec Tel: Ecuador	500,000	FONTAGR O

	Project number	FONTAGRO Short Title	Complete Project Title	Project Leaders	Institutions and Member Countries involved in the Consortium	Chief Researcher	Resources assigned by FONTAGRO- (USD)	Source
9	438/05	Reduction in the use of pesticides on rice and beans	Reduction in the use of and increased resistance to pesticides in the cultivation of rice and beans in Colombia, Venezuela and Ecuador	CIAT - Colombia	INIA – Venezuela; CIAT, FEDEARROZ – Colombia; INIAP - Ecuador	Fernando Correa, Ph.D. Phytopathologist [and Leader] Rice Project, CIAT f.correa@cgiar.org	224,000	FONTAGR O
10	787/05	Naturalized leguminous fodder	Enhancing the genetic base of naturalized leguminous fodder for sustainable pastoral systems	INTA - Uruguay	INIA, Univ. Austral, Biosemillas Ltda – Chile; Cooperativas Agrarias Federadas, Univ. de la República, Calister S.A., ` Uruguay; PROCISUR	Monica Rebuffo (Genetic Improvement) mrebuffo@inia.org.uy	424,035	FONTAGR O
11	110/04	Health of banana soils	Technological innovation for improved quality and health of banana soils in Latin America and the Caribbean	IPGRI/INIBAP	CATIE, CORBANA – Costa Rica; INIA- Venezuela; IDIAP, CEDAF – Dominican Republic	Franklin Rosales, IPGRI- INIBAP Costa Rica, inibap@catie.ac.cr	500,000	IDB/CGIA R
12	15/03	Innovation with small-scale producers	Technological development in innovation processes with small-scale producers	PBA Colombia	PROINPA – Bolivia; CIAT, CORPOICA – Colombia; IICA – Costa Rica; INIAP – Ecuador; INIA – Peru, INIA – Venezuela.	Santiago Perry, Executive Director PBA, sperry@corporaciopba.or g & Andrés Laignelet, CORPOICA, alaignelet@cable.net.co	350,000	FONTAGR O
13	37/03	Biocontrol of nematodes and Sigatoka in bananas (Musa)	Development and use of bioproducts for biocontrol of nematodes and Black Sigatoka on plantain and banana plantations	INIBAP/LAC	CATIE - Costa Rica; INIA - Venezuela; IDIAP - Panama; IDIAF - Dominican Republic	Franklin Rosales inibap@catie.ac.cr & Alba Stella Riveros, CATIE. asrivero@catie.ac.cr	170,250	FONTAGR O
14	14/03	Exotic Andean Fruit Trees	Technological development for the strengthening of post- harvest management of exportable exotic fruit trees of interest to Andean countries: Uchiva ( <i>Physialis Peruviana L</i> ), Granadilla (Passiflora ligularis L) and tree tomato (Cyphomandra Betacea (Cav) (Sndt))	CORPOICA – Colombia; INIAP - Ecuador	CIATI, Univ. Nacional de Colombia – Colombia; Agroalfapecuaria Cia – Ecuador; Promoción de Exportaciones Agrícolas No Tradicionales ( <i>Promotion</i> of Non-Traditional Agricultural Exports) PROEXANT – Ecuador; CIRAD/FLHOR – Francia	Hugo Reinel García, CORPOICA, hugogarcia@yahoo.es and Beatriz Brito, INIAP, bbrito@ulo.satnet.net	287,360	FONTAGR O
15	32/03	Good practices on citrus using IPM	Development of integrated pest management [program] for citrus [production] in Peru and Chile in compliance with international regulations for good agricultural practices.	INIA – Chile	Servicio Nacional de Sanidad Agraria (National Agricultural Sanitary and Phytosanitary Service, Min. of Agriculture) SENASA – Peru; Laboratorios Tecnologicos Uruguayos (Uruguay Technological Laboratories) LATU	Renato Ripa, INIA Chile rripa@inia.cl Tel: 33-312-366	222,045	FONTAGR O

	Project number	FONTAGRO Short Title	Complete Project Title	Project Leaders	Institutions and Member Countries involved in the Consortium	Chief Researcher	Resources assigned by FONTAGRO- (USD)	Source
16	05/03	Corn and beans bio-fortified with micronutrients	Improvement of human nutrition in poor communities of Latin America using ordinary beans and corn (QPM) biofortified with micronutrients.	CIAT - Colombia	Centro de Investigaciones Fitogenéticas de Pairumani (Pairumani Center for Phytogenetic Research) CIFT – Bolivia; Fundación para la investigación y desarrollo agrícola (Foundation for agricultural research and development) FIDAR – Colombia; Univ. del Valle de Colombia; Centro de Investigaciones de Lara (Lara Research Center), Venezuela; INIA – Venezuela	Matthew Blair, CIAT Colombia Tel: 57-2-445-0000 m.blair@cgiar.org	350,000	FONTAGR O
17	21/03	Risk assessment in agriculture	Development of information and monitoring system for risk assessment in agricultural production (SIMERPA) in Paraguay and Uruguay.	INIA - Uruguay	Univ. Católica Nuestra Señora de la Asunción Paraguay	Augustin Giménez, INTA Uruguay; Tel: 598-574-8000 agimenez@inia.org.uy	142,200	FONTAGR O
18	42/99	Food safety in vegetables	Food safety in Central America	Texas A&M University, EEUU	MAG – Costa Rica; Instituto Nicaraguense de Tecnologia Agropecuaria (Nicaragua Instutute of Agricultural Technology)	Bernardo Mora, bmora@costarricense.cr (Lettuce food safety) and Octavio Menocal, omenocal@inta.gob.ni (Tomato food safety)	100,000	USDA/AR S
19	18/01	Integrated pest management in apples	Development of bio-control strategies for the integrated management of fruit (apple) pests	INTA - Argentina	INIA-Chile; INIA- Uruguay; Univ. de la Republica – Uruguay; Washington State University, Department of Entomology-USA; Institut National des Sciences Appliquées de Lyon (Lyon National Institute of Applied Sciences) - France	Eduardo N. Botto, INTA Argentina Tel: 011 - (54-11) 4481- 4320 enbotto@cnia.inta.gov.ar	180,000	FONTAGR O
20	01/01	Wheat germplasm for zero tillage	Characterization and development of wheat germplasm adapted for zero tillage	CIMMYT- Uruguay	INTA-Argentina; INIA-Uruguay; DIA- Paraguay; INIA-Chile; AAPRESID	Roberto Garcia, INTA Argentina Tel: 011-(54-24) 77-43- 1250 pcimmyt@pergamino.inta .gov.ar	140,000	FONTAGR O USD/ARS
21	52/01	Mycotoxins for white fly control	Development of mycoinsecticides for the integrated management of white fly (beuricia tabaci) in fruit and horticultural cultivation in neo-tropical areas.	CATIE	CORPOICA - Colombia	Eduardo Hidalgo, CATIE ehidalgo@catie.ac.cr	150,000	FONTAGR O

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	Project number	FONTAGRO Short Title	Complete Project Title	Project Leaders	Institutions and Member Countries involved in the Consortium	Chief Researcher	assigned by FONTAGRO- (USD)	Source
22	32/01	Pasture genetic resources	Characterization of forage resources in Rio de la Plata and Patagonia grasslands.  Development of evaluation systems for and prognostics on primary productivity	IFEVA/CONICET Argentina	INTA, Univ. Nacional de Mar del Plata, Univ. Nacional de Comahue, Secretaria de la Producción, EEA/INTA Esquel – Argentina; Univ. de la Republica – Uruguay; SUL – Uruguay; Department of Rangeland Ecosystem Science and Natural Resource Ecology Laboratory – USA; Department of Ecological Modeling - Germany	Dr. José M. Paruelo	100,000	FONTAGR O
23	21/01	Post-harvest technologies in guava	Technological development for post-harvest management of guava in Colombia and Venezuela	CORPOICA/ CIMPA – Colombia; INIA/CIAE - Venezuela	CORPOZULIA – Venezuela; ASOHOFRUCOL, ICTA, CIAT – Colombia; IICA-PROCIANDINO	Raúl Gómez , CORPOICA, eesperimentalcimpa@yah oo.com	150,000	FONTAGR O
24	22/01	Tree tomato improvement	Tree tomato: fruit with potential to diversify Andean agriculture	CORPOICA – Colombia	INIAP – Ecuador; UNC – Peru; INIA- Peru; UCLA-Venezuela; CIAT; IPGRI; IICA-PROCIANDINO	Mario Lobo, CORPOICA Colombia porgvlas@gmail.com	200,000	FONTAGR O
25	13/01	Use of Rizospheric microorganisms in the production of alfalfa	Contribution to sustainable alfalfa production through rhizospheric microorganism management in Argentina, Chile and Uruguay	IFFIVE/INTA- Argentina	IMIZA-INTA – Argentina; EEA – Argentina; UNLP – Argentina; MGAP – Uruguay; <b>Pontificia Universidad</b> <b>Católica de Chile</b>	Roberto W. Racca, INTA Argentina Tel: 011 (54-351) 497- 3636 Rracca@inta.gov.ar	200,000	FONTAGR O
26	04/01	Health standards in aquaculture	Improving health standards of the species that sustain aquaculture in Latin America through therapies that induce natural immunity.	Biodinamica S.A. – Chile	HEFESA LTDA – Chile; Instituto de Agricultura de la Univ. de los Llanos- Colombia; Univ. Autóctona de Nuevo León-Mexico; Univ. Lisandro Alvarado (UCLA) - Venezuela	Claudia López Laport BIODINAMICA, Chile Tel: (56-2) 2040927 claudialopez@terra.cl	200,000	FONTAGR O
27	24/01	Optimal maturity parameters in avocado	Non-destructive methods and molecular markers for determining appropriate dates for harvesting five varieties of avocado	IDIAF – Dominican Republic	CEPOC – Universidad de Chile; Instituto Tecnológico de Costa Rica; Univ. Nacional Autónoma de Nicaragua	Genaro Reynoso, IDIAF greynoso@idiaf.org.do	100,000	FONTAGR O
28	55/99	Smilax spp	Development in the sustainable management of Smilax spp (medicinal plant) in natural ecosystems and agroforestry systems in Central America; from small-scale production to commercialization	CATIE	Univ. de Costa Rica; Instituto Tecnológico de Costa Rica; Univ. Nacional Autónoma de Nicaragua	Gerardo Mora Lopez CIPRONA Costa Rica Tel: 011-(506)207-5044 gmora@cariari.ucrac.cr	250,000	FONTAGR O
29	54/99	[Durable resistance to] Rusts in wheat	Identification and use of durable genetic resistance to rusts in wheat [for bread]	INIA – Uruguay	INIA – Chile; DIA – Paraguay; INTA – Argentina; CIMMYT – Mexico	Silvia German, INIA Uruguay Tel: 011- (598-5) 222- 005 sgerman@le.inia.org.uy	232,561	USDA/AR S

					Institutions		Resources	
	Project number	FONTAGRO Short Title	Complete Project Title	Project Leaders	and Member Countries involved in the Consortium	Chief Researcher	assigned by FONTAGRO- (USD)	Source
30	48/99	Embryogenesis in coffee	Dissemination, through wide- scale somatic embryogenesis, in Central America and the Dominican Republic, of F1 varieties of improved arabica coffee and of the < <nemaya>&gt;high-yield variety of rootstocks, resistant to the main diseases and pests</nemaya>	IICA; PROMECAFE - Guatemala	ICAFE – Costa Rica; UNICAFE – Nicaragua; PROMECAFE – El Salvador, Honduras, Costa Rica, Panama	Guillermo Canet, ICAFE Costa Rica Tel: 011-(506) -433-8790	125,000	IDB
31	09/[Se p?]-99	Climbing beans, Andean highlands	Selection of gametes for improving resistance to diseases in the climbing bean native to the Andean highlands	PROFRIZA/CIAT - Colombia	CORPOICA – Colombia; INIA – Ecuador; UC – Ecuador; UNALM – Peru	Matthew Blair; CIAT Colombia Tel: 57-2-445-0000 m.blair@cgiar.crg	125,000	IDB
32	58/99	Oil palm	Identification of molecular markers associated with resistance to spear or bud rot in the oil palm	CENIPALMA - Colombia	CIAT-Colombia; DENPASA – Brazil; COOPEAGROPAL – Costa Rica; INIAP – Ecuador	Pedro Rocha, CENIPALMA Colombia Pedro.rocha@cenipalma.o rg	125,000	FONTAGR O
33	01/99	Plantain - banana cultivars	Development of plantain and banana cultivars for local consumption, resistant to the black <i>Sagatoka</i> for Latin America.	INIBAP/CATIE	Univ. de Tolima – Colombia; CATIE – Costa Rica; CORBANA – Costa Rica	Franklin Rosales, INIBAP inibap@catie.ac.cr and Miguel Gomez Lim, CINVESTAV, mgomez@ciea.ira.cinvest av.m	125,000	FONTAGR O
34	24/99	Pyricularia in rice: Southern Cone	Development of a strategy to bring about durable resistance in Pyricularia grisea in rice in the Southern Cone.	INTA Argentina	INTA- Uruguay; IRGA – Brazil; CIAT – Colombia; PURDUE University – EEUU	Alberto Blas Llvore, INTA, Argentina Tel: 011-(54- 34) -42-425561 econcep@inta.gov.ar	125,00	FONTAGR O
35	62/99	IPM of <i>Sigatoka</i> in plantains	Training and research for the integrated management of the Sigatoka in plantains in Latin America and the Caribbean.	INIBAP/CATIE	CIRAD – France; CNPMF/EMBRAPA – Brazil; CORBANA – Costa Rica; CORPOICA – Colombia; FONAIAP – Venezuela; INIAP – Ecuador; INIFAP – Mexico; CEDAF – Dominican Republic; UNAN - Nicaragua	Mauricio Guzman, CORBANA Costa Rica Tel: 011- (506) - 763- 3176 investigaciones@corbana.c om	125,000	USDA/AR S
36	29/98	Fusarium wilt in wheat	Development of technologies for the integrated management of fusarium wilt in wheat	INTA - Argentina	INIA- Uruguay; DIA/IAN – Paraguay; CIMMYT - Uruguay	Jorge Nisi, INTA Argentina Telefax: 011-(54-472) 25001 ejuarezc@inta.gov.ar	350,000	IDB
37	39/98	Industrial quality in wheat	Characterization and development of germ plasma to improve the industrial quality of wheat in the Southern Cone	CIMMYT	INIA Uruguay; INTA – Argentina; INIA – Chile; DIA/IAN – Paraguay; CIMMYT - Argentina	Ruben Verges, INIA Uruguay Tel: 011-(598) -574-8000 verges@inia.org.uy	350,000	IDB
38	08/98	Extension research in Latin America and the Caribbean	Extension and support services: Towards sustainable agriculture in Latin America and the Caribbean	IICA – Costa Rica	Federación Nacional de Cafeteros (National Federation of Coffee Growers) , IICA PRONATTA – Colombia; MAG – Costa Rica; INTA – Argentina	Jairo Cano Gallego y Jorge Ardila	100,000	IDB

	Project number	FONTAGRO Short Title	Complete Project Title	Project Leaders	Institutions and Member Countries involved in the Consortium	Chief Researcher	Resources assigned by FONTAGRO- (USD)	Source
39	30/98	Poverty and environmental degradation in Latin America	Relationship between rural poverty and environmental degradation in Latin America	RIMISP - Chie	INIA - Chile; GRADE - Peru; INTA - Argentina; CORPOICA - Colombia; GIA- Chile; CIES - Venezuela; Univ. de Caldas, - Colombia; CIP - Ecuador; CONDESAN - Peru; ECOFORCA - Brazil	Julio Antonio Verdegué Sacristán and Germán Escobar RIMISP Chile Tel: 011-(56-2) -223-2423 berdegua@reuna.cl	300,000	IDB
40	28/98	IPM in Andean fruit trees	Integrated Pest Management for improving sustainable production of fruit in the Andes.	INIAP - Ecuador	CORPOICA – Colombia; INIA - Venezuela	Jorge Revelo Moran, INIAP, Ecuador Tel: 011-(593-2) 2690- 693, jrevelo@ecnet.ec	250,000	IDB
41	42/98	Corn: genetic resistance to insects	Genetic resistance of corn to insects and disease in tropical environments in Latin America	CIMMYT - Colombia	INTA – Argentina; IBTA – Bolivia; CORPOICA – Colombia; INIAP – Ecuador; INIA – Venezuela; CIAT – Colombia; INIA – Chile	Carlos De Leon, CIMMYT Tel: 011-(57-2)-445-0025	250,000	IDB
42	22/98	Development of sweet potato products in Latin America	Development of sweet potato products in Latin America	CIP - Peru	INTA – Argentina, ISA – Dominican Republic; INIA, Instituto de Investigación Nutricional, Univ. Nacional Agraria La Molina – Peru	Gordon Prain, CIP Peru Tel: 011-(51-1)-349-5017 g.prain@cgiar.org	250,000	IDB
43	05/98	Potato: industrial uses	Selection and use of varieties of potatoes with resistance to diseases for industrial processing in Latin America	CIP - Peru	INTA – Argentina; INIA – Venezuela; INIA – Chile; Univ. Nacional de Colombia; CORPOICA – Colombia; PROINPA – Bolivia; ISA – Dominican Republic; INIAP - Ecuador	Merideth Bonierbale, Juan Landeo, CIP Peru Tel: 011-(51-1)349-6017 m.bonierbale@cgiar.org	250,000	IDB
44	26/98	Genetic characterization of <i>Nothofagus</i>	Genetic characterization of Nothofagus obliqua populations (Miro. Et Oerst) and N alpine (Poepp. Et Endi,) Oerst (=N.Nervosa (Phil.) Dim Et Mil.) through molecular and isoenzymatic markers.	INTA – Argentina; INIA – Chile	INTA - Argentina; INIA - Chile	Mario Paredes, INIA Chile Tel: 011-(56-42)- 209-712 mparedes@quilamapu.inia. cl	250,000	IDB
45	13/98	Competitive corn production zones	Competitive sustainable maize production zones in Central America	CIMMYT	CIMMYT – Costa Rica; IDIAP – Panama; MAG – Costa Rica; INTA – Nicaragua	Gustavo Sain, CIMMYT, Costa Rica Tel: 011-(506)-229-2457 gsain@iica.ac.cr	250,000	IDB
46	24/98	Genetic resources of Papaya	Taking advantage of genetic resources of papayas for purposes of improvement and promotion	Univ. Central de Venezuela; INIA - Venezuela	INIA – Venezuela; Univ. de Caldas, Univ. Nacional de Medellín, CIAT, CORPOICA, IPGRI – Colombia; Univ. de Costa Rica; MAG – Costa Rica; Univ. Técnica de Ambato – Ecuador; CIRAD – France; DENAREF - Ecuador	Freddy Leal, UCV Venezuela Tel: 011-(58-14)-9448271 flealpinto@hotmail.com	200,000	IDB

	Project number	FONTAGRO Short Title	Complete Project Title	Project Leaders	Institutions and Member Countries involved in the Consortium	Chief Researcher	Resources assigned by FONTAGRO- (USD)	Source
47	04/98	Globalization and technological scenarios	Commercial and financial globalization, economic blocs and agriculture in the Americas: Scenarios for the technological development of agriculture in the hemisphere	UFORU; IICA - Colombia	IICA - Costa Rica; IICA - Chile	Carlos Federico Espinal IICA Colombia Tel: 011-(57-1)-220-7000 cespinal@iica.orq.co	200,000	IDB
						TOTAL	\$ 11,706,476. 00	

The totals indicated for each project are subject to change during review of eligibility for funding and development of Operation Plans, which must be prepared in order for the execution Agreements to be signed