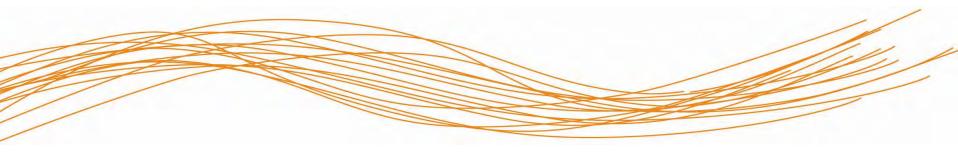


# European Research Programmes in Support of Plant Health



EFSA meeting on PRA

Parma, 6-7 December 2007

Jean-François MALJEAN European Commission DG Research

Directorate E: Biotechnologies, Agriculture, Food





#### FP7 2007 - 2013

#### **Specific Programmes**

€M\*

#### **Cooperation – Collaborative research**

\_\_\_ 32.365

#### Ideas - Frontier Research

7.460

#### **People** – Human Potential

4.728

#### Capacities - Research Capacity

4.217



JRC (non-nuclear)

JRC (nuclear)

#### **Euratom**

SEVENTH FRAMEWORK PROGRAMME

<sup>\*</sup> Council's agreement of July 2006



### Cooperation - Collaborative research

	10 Themes	€M *
1.	Health	6.050
2.	Food, Agriculture, Fisheries and Biotechnology	1.935
3.	Information and Communication Technologies	9.110
4.	Nanosciences, Nanotechnologies, Materials and new Production Technologies	3.500
5.	Energy	2.300
6.	<b>Environment (including Climate Change)</b>	1.900
7.	Transport (including Aeronautics)	4.180
8.	Socio-Economic Sciences and the Humanities	610
9.	Space	1.430
10.	Security  * Council's agreement of July 2006	1.350



# 2. Food, Agriculture, Fisheries and Biotechnology

2.1.

Sustainable production and management of biological resources from land, forest, and aquatic environments

2.2.

"Fork to farm": Food (including sea-food), health and well being

2.3.

Life sciences, biotechnology and biochemistry for sustainable non-food products and processes



# Some major trends/challenges affecting the Bio-economy

Changing patterns in world trade: - globalisation

- CAP reform

- consumer-led production

2. Coping with climate change: - spread of plant diseases

- new varieties/crops

- coping with unpredictability

- water issues

- soil degradation

3. Feeding the increasing world population: - 6.5 bn in  $2005 \Rightarrow 8.3$  bn in 2030

increasing calorie consumption per capita

- rising meat demand – up 70% by 2030

4. Increasing environmental considerations:- minimizing further agricultural land use

habitat protection

maintenance of biodiversity

5. Shifts in energy supply: - higher costs of fossil fuels/scarcity

security of supply

- CO<sub>2</sub> reduction





#### committee Contribution to Plant Research – FP6 Projects

Project Acronym	Project Instrument	Project Title	Project Start Date	Project End Date	EU contribution
DEVELONUTRI	STP	Development of High Throughput Approaches to Optimise the Nutritional Value of Crops and Crop- Based Foods			3.300.000
ENVIRFOOD	SSA	Environment friendly food production system: requirements for plant breeding and seed productionomental	1/10/2004	1/10/2005	80.000
REPCO	STP	Replacement of Copper Fungicides in Organic Production of Grapevine and Apple in Europe	1/11/2003	1/11/2006	1930480
2E-BCAS IN CROPS	STP	Enhancement and Exploitation of Soil Biocontrol Agents for Bio-Constraint Management in Crops	1/01/2004	1/01/2007	2.300.000
CLEANFRUIT	STP	Improving the quality of European Citrus & Fruit by developing Medfly SIT technology so it can be widely applied in Europe	1/01/2004	1/01/2007	2.367.000
HAIR	STP	Harmonized Environmental Indicators for Pesticide Risk	January 2003	March 2007	1.677.196
PORTCHECK	STP	DEVELOPMENT OF GENERIC 'ON SITE' MOLECULAR DIAGNOSTICS FOR EU QUARANTINE PESTS AND PATHOGENS'	1/03/2004	1/03/2007	1.367.487
SIGMEA	STP	Sustainable introduction of GMO's into European Agriculture	3/05/2004	3/05/2007	4.546.260
EAN-SEABUCK	SSA	Establishment of European-Asian Network for the development of strategies to enhance the sustainable use of Sea Buckthorn	1/08/2005	1/08/2007	500.000
GRAIN LEGUMES	IP	New Strategies to Improve Grain Legumes for Food and Feed	10/02/2004	10/02/2008	14.750.000
IRRIQUAL	STP	Sustainable orchard irrigation for improving fruit quality and safety	15/04/2005	15/04/2008	2.250.000
DIABR-ACT	SSA	Harmonise the strategies for fighting Diabrotica virgifera virgifera.	1/06/2006	1/06/2008	974.703





#### **Sommitte** Ur contribution to Plant Research – FP6 Projects

Community research					
Project Acronym	Project Instrument	Project Title	Project Start Date	Project End Date	EU contribution
BIOACTIVE-NET	SSA	Assessment and dissemination of strategies for the extraction of BIOACTIVE-NET compounds from tomato, olive and grape processing residues	1/06/2006	1/06/2008	589.000
REBECA	SSA	Regulation of Biological Control Agents	1/06/2006	1/06/2008	1.000.000
BIODET	SSA	Networking in the application of biosensors to pesticide detection in fruits and vegetables	1/06/2006	1/06/2008	
PROTECTOR	STP	Recycling and upgrading of bone meal for environmentally friendly crop protection and nutrition	1/03/2005	1/09/2008	810.000
MAC-OILS	SSA	Mapping and Comparing Oils	1/09/2006	1/09/2008	593.000
EUROMEDCITRUSNET	SSA	Safe and High Quality Supply Chains and Networks for the Citrus Industry between Mediterranean Partner Countries and Europe	1/10/2006	1/10/2008	400.000
FOOTPRINT	STP	Functional Tools for Pesticide Risk Assessment and Management in Europe	1/01/2006	1/01/2009	1.209.762
EUROCROP	CA	Agricultural Research for Improving Arable Crop Competitiveness	1/05/2006	1/01/2009	599947
CO-EXTRA	IP	GM and non-GM supply chains : their CO- EXistence and TRAceability	1/04/2005	1/04/2009	13.000.000
ORWINE	STP	Organic viticulture and wine-making: development of environment and consumer friendly technologies for organic wine quality improvement and scientifically based legislative framework	1/02/2006	1/04/2009	1345898
TRANSCONTAINER	STP	Developing efficient and stable biological containment systems for genetically modified plants	1/05/2006	1/05/2009	4.170.000





#### committee on tribution to Plant Research – FP6 Projects

Project Acronym	Project Instrument	Project Title	<b>Project Start Date</b>	Project End Date	EU contribution
ALTERBROMIDE	CA	Dissemination Of Sustainable Alternatives To Methyl Bromide	1/09/2006	1/06/2009	500.000
SAFIR	STP	Safe and High Quality Food Production using Poor Quality Waters and Improved Irrigation Systems and Management	1/10/2005	1/10/2009	4.740.000
META-PHOR	STP	Metabolomic Technology Applications for Plants, Health and Outreach	1/10/2006	1/10/2009	3.400.000
MICRO-MAIZE	STP	Management of plant-beneficial microbes to balance fertiliser inputs in maize monoculture	1/11/2006	1/11/2009	1.900.000
FARMSEEDOPORTUNITIES	STP	Opportunities for farm seed conservation, breeding and production	1/01/2007	1/01/2010	808.538
PEPEIRA	STP	Pepino mosaic virus: epidemiology. economic impact and pest risk analysis	1/02/2007	1/02/2010	801.069
BIOEXPLOIT	IP	EXPLOITATION OF NATURAL PLANT BIODIVERSITY FOR THE PESTICIDE-FREE PRODUCTION OF FOOD	1/04/2005	1/04/2010	15.780.000
HEALTHGRAIN	IP	Exploiting bioactivity of European cereal grains for improved nutrition and health benefits	1/06/2005	1/06/2010	10.800.000
RHIBAC	STP	Rhizobacteria for reduced fertiliser inputs in wheat	1/01/2007	1/07/2010	2.000.000
ENDURE	NOE	European Network for the Durable Exploitation of crop protection strategies	1/01/2007	1/01/2011	11.200.000
EU-SOL	IP	High Quality Solanaceous Crops for Consumers, Processors and Producers by Exploration of Natural Biodiversity	1/05/2006	1/05/2011	18.700.000

+ EUPHRESCO ERA-NET

TOTAL > 130MEuro = almost 20% of the total budget of FP6-FQS



### Our contribution to Plant Research – FP7 Projects FIRST CALL: KBBE-2007-1

Development of more efficient risk analysis techniques for pests and pathogens of phytosanitary concern

#### One proposal selected in June 2007:

- Acronym: PRATIQUE

- Full title: Enhancements of Pest Risk Analysis Techniques

- Co-ordinator: Central Science Laboratory (UK)

- Number of partners: 15

- Duration: 39 months

- Expected max. EC contribution: ca. 2 750 000 euro

- Tentative expected starting date: beginning of 2008

- The project in a nutshell:

- to assemble the datasets required to construct effective PRAs valid for the whole of the EU
- to conduct multi-disciplinary research that enhances the techniques used in PRA
- to ensure that the decision support scheme for PRA meets its purpose is efficient and user-friendly.



### Our contribution to Plant Research – FP7 Projects FIRST CALL: KBBE-2007-1



#### Containment of Sharka virus in view of EU-expansion

#### One proposal selected in June 2007:

- Acronym: SHARCO

- Full title: Enhancements Sharka Containment

- Co-ordinator: INRA (FR)

- Number of partners: 13

- **Duration**: 48 months

- Expected max. EC contribution: ca. 2 950 000 euro

- Tentative expected starting date: beginning of 2008

- The project in a nutshell:

- In the field of epidemiology, develop new methods for monitoring and fighting the PPV spread
- In the field of biology, develop new genetic tools for selection in view of improving resistance of plants cultivated in orchards
- In the field of agricultural management, help the end-users to take advantage the project outcomes.



### Our contribution to Plant Research – FP7 Projects FIRST CALL: KBBE-2007-1



#### **External costs of pesticides**

#### One proposal selected in June 2007:

- Acronym: TEAMPEST

- **Full title:** Theoretical Developments and Empirical Measurement of the External Costs of Pesticides

- Co-ordinator: Aristotle University of Thessaloniki (GR)

- Number of partners: 10

- Duration: 36 months

- Expected max. EC contribution: ca. 2 250 000 euro

- Tentative expected starting date: beginning of 2008

- The project in a nutshell:

• to develop a consolidated methodological framework comprised of detailed qualitative and quantitative analytical tools, in order to identify external costs of pesticide use and to study the development of policy instruments that lead to sustainable pesticide use,

• to test and validate the proposed regulatory system by applying it in different countries, so as to study the feasibility of such alternative regulatory systems.



### CALL 2B: KBBE-2008-2B

Publication: Nov. 30, 2007 and Deadline: Feb. 26, 2008

### Development of new diagnostic methods in support of Plant Health policy

This Project will build a sustainable diagnostic resource to enable 'DNA-barcode identification' ultimatively for all quarantine plant pests or pathogens of statutory importance. Key work will include: obtaining or producing relevant vouchered sequence data for individual pests or pest groups and position them in a correct taxonomic context, developing generic diagnostic tools based on these barcode sequences; linking vouchered sequence information to published biological information; developing strategic approaches and methodologies to enable the establishment of DNA banks and access to digital voucher specimens.

Funding scheme: Small collaborative project.

**Expected impact:** The project will significantly help tackle increasing risks to EU plant health from exotic pests linked to increased globalisation of trade in plants/products. It will support better cooperation between EU diagnostic laboratories and potential moves towards reference laboratories by providing central approaches and a standardised and vouchered resource for using DNA/RNA sequence data in diagnostics for quarantine plants pests and pathogens.



# Food, agriculture, fisheries and biotechnology research: <u>Clear need to prioritise!</u>

SEVENTH FRAMEWORK

#### "More with less"

- Theme 2 FP7 "Food, Agriculture, Biotechnology" has much broader scope than priority 5 "Food Quality&Safety" of FP6 (added activity 3 on biotech products and processes for non-food applications)
- Research to support policies, international cooperation and coordination of national research is integrated into the themes
- Budget for first calls of theme 2 FP7 comparable (or lower) than for priority 5 - FP6

#### Need to prioritise along the following criteria:

- New areas/topics not (little) covered in previous FPs.
- Continue/follow-up on successful EU research activities in order to achieve maximum impact.
- Preparatory actions for identifying priority topics/activity areas for future calls, i.e. analysis of certain research/technology options for addressing specific goals; in cooperation with TPs and ERA-NETs



# The longer term: 2009 - 2010

#### A process for priority setting: has already started

Main Events - Workshops

Technology Platforms (Plants for the Future)

**EC-Funded projects** 

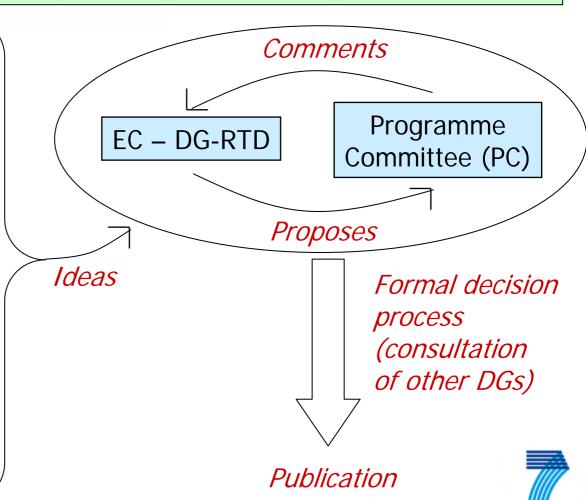
Research Groups and Associations

Other DGs (ENV, AGRI, SANCO,...)

Standing Committee on Agricultural Research (SCAR)

**ERA-Nets** 

Other Stakeholders (consumers, farmers,...)





# The longer term: 2009 - 2010

#### Criteria for priority setting

- Fits into the Specific Programme
- Justification (timely, needed, relevant,...)
- Expected impact
- Source(s)
- Budget availability
- European added value + subsidiarity principle
- Complementary to other initiatives





# Theme 2-specific requirements and some general aspects of importance

 Specific participation rule for Specific International Co-operation Actions (SICAs):

2 + 2 (or more if specified – may also target countries or regions)

Funding thresholds (to be regarded as an eligibility criterion !):

small Collaborative Projects:

up to 3 M€

Coordination and Support Actions:

up to 1 M€

- One project per topic is funded
- Participation of international organisations and participants from third countries possible (and encouraged) in addition to minima