



Strengthening the Knowledge-Based Bio-Economy - The EU support to (plant health and protection) research: ongoing activities and roadmap for the future

First meeting of the expert group
on the Thematic Strategy on the
sustainable use of pesticides
4 June 2009, Brussels

Jean-François MALJEAN
European Commission
DG Research
Directorate E: Biotechnologies,
Agriculture, Food

Food, **A**griculture and **F**isheries, and **B**iotechnology
Knowledge - Based Bio - Economy (K B B E)

This presentation shall neither be binding nor construed as constituting a commitment by the European Commission

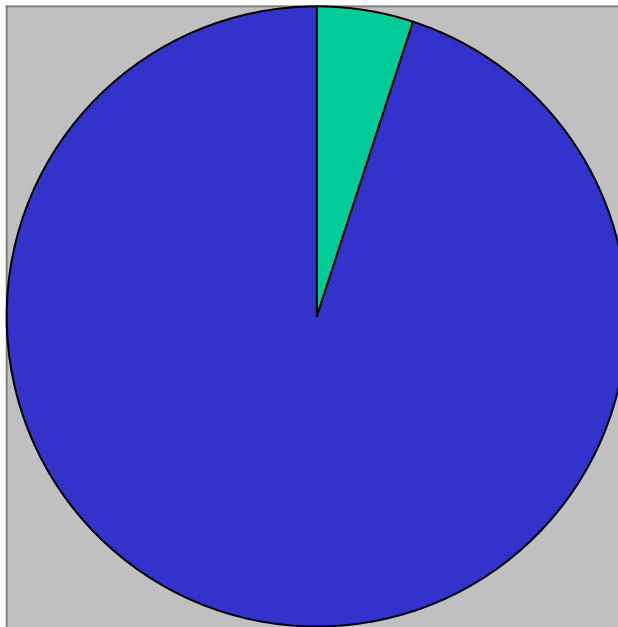




EUROPEAN
COMMISSION

Community research

EU investment in research



■ EU 27 ■ National (public + private)

Our Mark:

- Excellence
- Integration
- (Large) project-based financing
- Generic and strategic



EUROPEAN
COMMISSION

Community research

The 7th EU Framework Programme (2007-2013)

	<p><u>Cooperation</u> Collaborative Research 32 365 M€</p>	<p><u>Ideas</u> Frontier Research 7 460 M€</p>	
	<p><u>People</u> Human Potential 4 728 M€</p>	<p><u>Capacities</u> Research Capacity 4 217 M€</p>	
<p><u>Euratom</u></p>		<p><u>JRC</u></p>	

Specific Programmes: Total 53 billion €

This presentation shall neither be binding nor construed as constituting a commitment by the European Commission





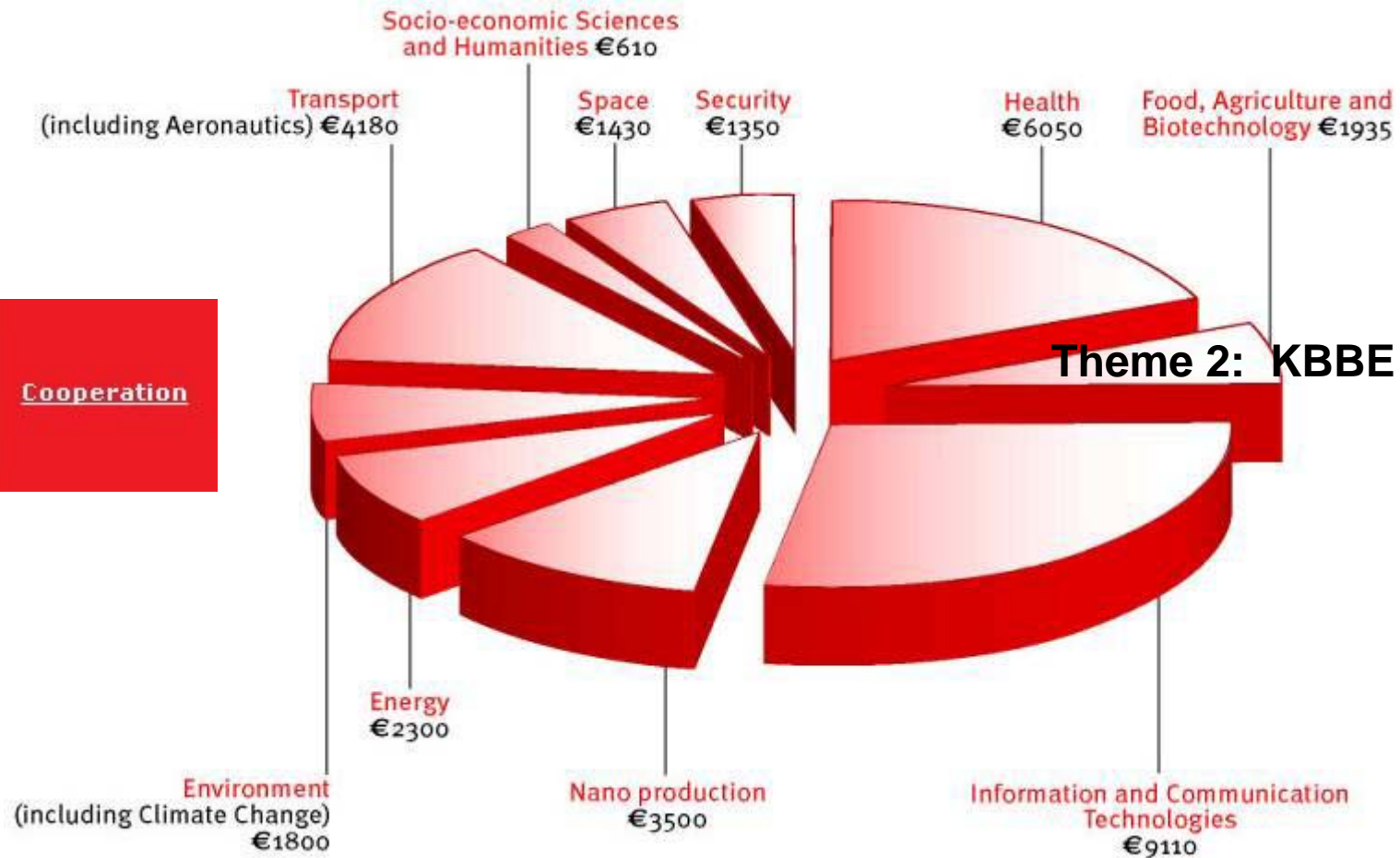
EUROPEAN
COMMISSION

Community research

Cooperation specific programme 10 themes



Cooperation



Theme 2: KBBE

Budget in million €

This presentation shall neither be binding nor construed as constituting a commitment by the European Commission





EUROPEAN
COMMISSION

Community research

Some major trends/challenges affecting the agriculture and forestry sector

1. Coping with high food and commodity prices and with difficulties in maintaining food security
2. Competition for land use
3. Feeding the increasing world population
4. Coping with climate change
5. Addressing increasing environmental considerations
6. Adjusting to consumer demands
7. Globalisation



Our contribution to Plant Health/Protection (PHP) Research – FP7 Projects Road map 2009-2010 and beyond

Community research

Main Lines

Activity 2.1: Sustainable production and management of biological resources
Area 2.1.2 Increased sustainability of all production systems

Main line 7: Plant health and protection

- plant health: to prevent the introduction or spread in the Community of organisms harmful to plants or plant products, inc early detection methods;
- new threats due to climate changes and globalization, emerging and complex problems;
- plant protection: unwanted amounts of pesticides in soils, water and agricultural produce;
- large range of science fields (quarantine pests and pathogens; integrated pest management; biocontrol agents; weeds; pathogen biology, genetics and epidemiology);
- to control resistance mechanisms of pests and pathogens;
- taxonomy; classical plant pathology and other science fields are threatened with extinction and, unless urgent action is taken, indispensable expertise will disappear, and National Plant Protection Organizations will be unable to do their duty (EPPO Declaration 2004).



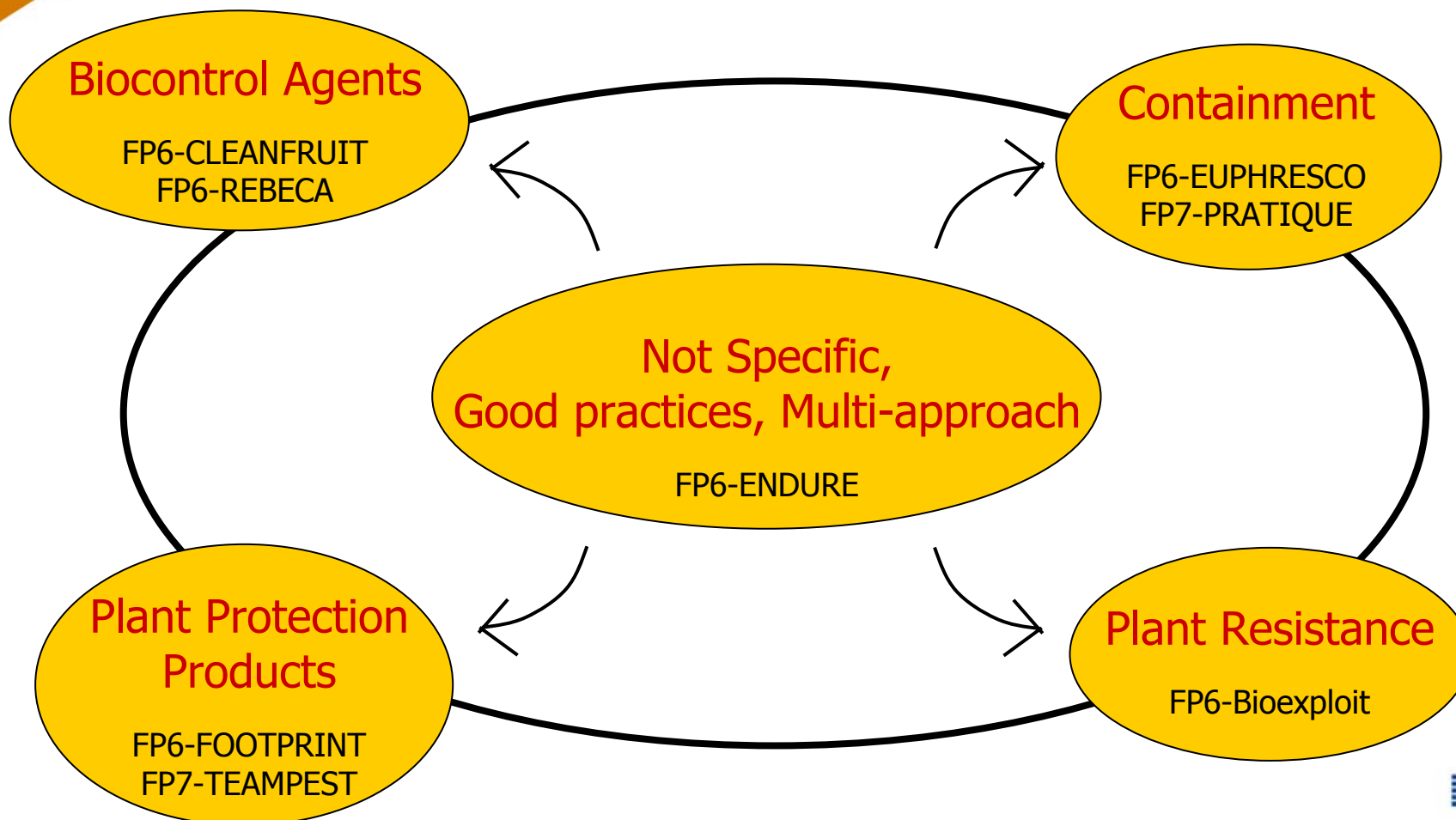


EUROPEAN
COMMISSION

Community research

Plant Health and Plant Protection (PHP)

Approach by method of action: some FP6/FP7 projects





Community research

Our contribution to Plant Health/Protection (PHP) Research – FP6/FP7 Projects

FP	Project Acronym	Project Instrument	Project Title	Project Start Date	Project End Date	EU contribution	Method of Action
FP6	REPCO	STREP	Replacement of Copper Fungicides in Organic Production of Grapevine and Apple in Europe	1/11/2003	1/11/2006	1.930.480	BCA
FP6	2E-BCAS IN CROPS	STREP	Enhancement and Exploitation of Soil Biocontrol Agents for Bio-Constraint Management in Crops	1/01/2004	1/01/2007	2.300.000	BCA
FP6	CLEANFRUIT	STREP	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	BCA
FP6	REBECA	SSA	Regulation of Biological Control Agents	1/06/2006	1/06/2008	1.000.000	BCA
FP6	PORTCHECK	STREP	Development of Generic 'On Site' Molecular Diagnostics for EU Quarantine Pests and Pathogens	1/03/2004	1/03/2007	1.367.487	Containment
FP6	RAPRA	STREP	Risk analysis for Phytophthora ramorum, a newly recognised pathogen threat to Europe and the cause of Sudden Oak Death in the USA	1/01/2004	1/04/2007	1.339.939	Containment
FP6	PEPEIRA	STREP	Pepino mosaic virus: epidemiology. economic impact and pest risk analysis	1/02/2007	1/02/2010	801.069	Containment
FP6	EUPHRESCO	ERA-Net	European Phytosanitary Research Coordination	1/05/2006	1/05/2010	2.630.000	Containment
FP7	PRATIQUE	SCP	Enhancements of Pest Risk Analysis Techniques	1/03/2008	1/06/2011	2.764.317	Containment
FP7	SHARCO	SCP	Sharka containment	1/03/2008	1/03/2012	2.935.773	Containment
FP7	QBOL	SCP	Development of a new diagnostic tool using DNA barcoding to identify quarantine organisms in support of plant health	1/07/1905	3/07/1905	2.991.433	Containment
FP6	RESISTVIR	CA	Coordination of research on genetic resistance to plant pathogenic viruses, and their vectors, in European crops	1/02/2005	31/01/2009	2.300.000	Plant Resistance
FP6	BIOEXPLOIT	IP	Exploitation of Natural Plant Biodiversity for the Pesticide-Free Production of Food	1/04/2005	1/04/2010	15.780.000	Plant Resistance





Community research

Our contribution to Plant Health/Protection (PHP) Research – FP6/FP7 Projects

FP	Project Acronym	Project Instrument	Project Title	Project Start Date	Project End Date	EU contribution	Method of Action
FP7	EUPHOROS	SCP	Efficient use of input in protected horticulture	2008	2012	2.995.408	PPP
FP6	HAIR	STREP	Harmonized Environmental Indicators for Pesticide Risk	1/01/2003	1/03/2007	1.677.196	PPP
FP6	BIODET	SSA	Networking in the application of biosensors to pesticide detection in fruits and vegetables	1/06/2006	1/06/2008	447.000	PPP
FP6	FOOTPRINT	STREP	Functional Tools for Pesticide Risk Assessment and Management in Europe	1/01/2006	1/01/2009	1.209.762	PPP
FP6	ALTERBROMIDE	CA	Dissemination Of Sustainable Alternatives To Methyl Bromide	1/09/2006	1/06/2009	500.000	PPP
FP7	TEAMPEST	SCP	Theoretical Developments and Empirical Measurement of the External Costs of Pesticides	1/05/2008	1/05/2011	2.266.380	PPP
FP6	PROTECTOR	STREP	Recycling and upgrading of bone meal for environmentally friendly crop protection and nutrition	1/03/2005	1/09/2008	810.000	Not Specific
FP6	ORWINE	STREP	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	1.345.898	Not Specific
FP6	ENDURE	NOE	European Network for the Durable Exploitation of crop protection strategies	1/01/2007	1/01/2011	11.200.000	Not Specific
FP6	DIABR-ACT	SSA	Harmonise the strategies for fighting Diabrotica virgifera virgifera.	1/06/2006	1/06/2008	974.703	Not Specific (Containment)

Total PHP = ca. 60 M€ since 2004 (50 M€ in FP6 and 10 M€ in FP7)

In FP6 it represents ca. 7% of the total FP6-Food R&D budget





EUROPEAN COMMISSION

Community research

Our contribution to Plant Health/Protection Research – FP7 Projects Road map 2009-2010 and beyond

An ongoing process for priority setting

Main Events - Workshops

Technology Platforms

EC-Funded projects

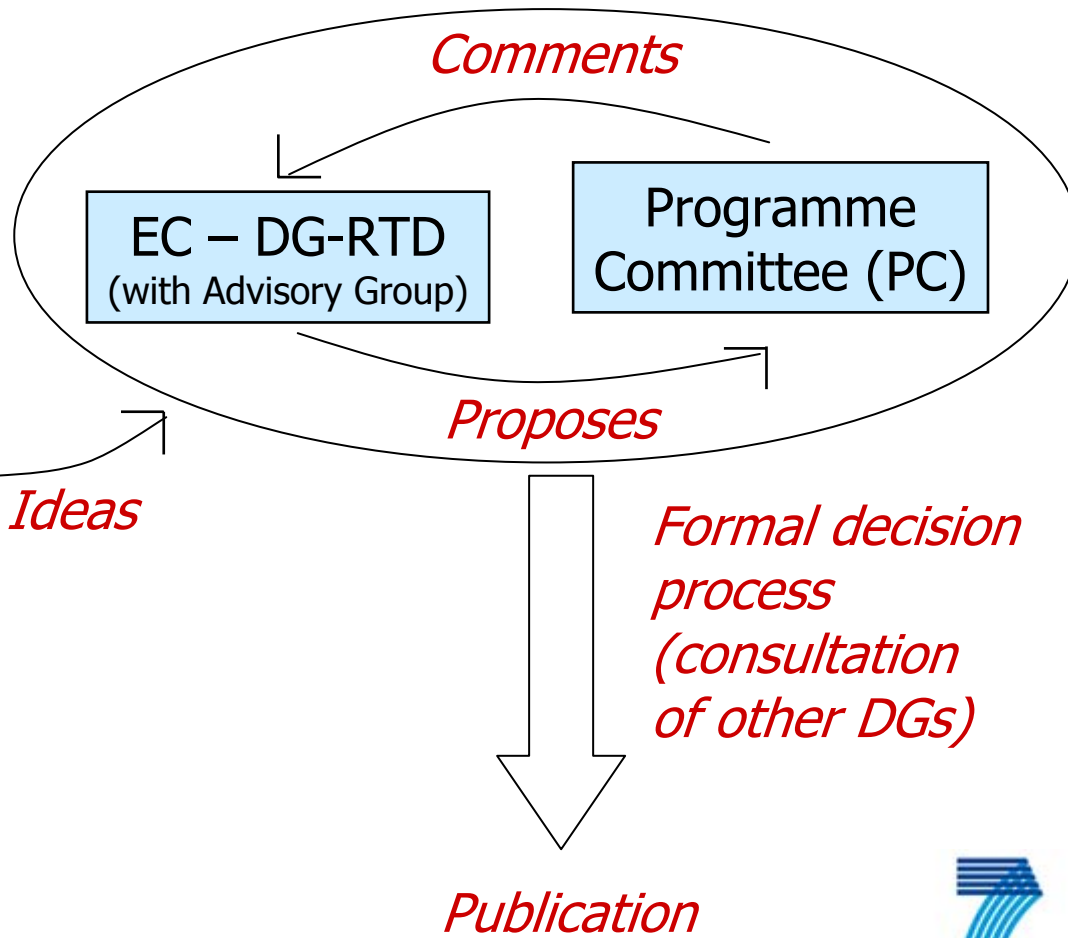
Research Groups and Associations

Other DGs and agencies (ENV, AGRI, SANCO, EFSA,...)

Standing Committee on Agricultural Research (SCAR)

ERA-Nets

Other Stakeholders (consumers, farmers,...)





EUROPEAN
COMMISSION

Community research

Provision for KBBE WP 2010

Integrated pest management in farming systems of major importance for Europe

- IPM understood in a broad sense, including preventive measures, observation and pest monitoring, plant protection products and biocontrol agents
- Reduction of the risks to human health and the environment and a reduced dependence on pesticides.
- Strong integration of biological, agronomical, technical, genomic, biochemical, socio-economic and ecological disciplines
- Appropriate scales for studies, with the farming system and the rotation cycle as key references.
- Combine modelling and experimentation, including physiological and molecular understanding of plant-pest interactions and development of symptoms
- Farming systems in which better control of pests and pathogens will have major effects at the European scale.
- Risks assessment and costs / benefit analysis.
- Dynamic dialogue with all relevant stakeholders

Funding scheme: Collaborative Project (large scale integrating project).

Expected roadmap: Publication in summer 2009, deadline for submission in January 2010, project start end 2010