16 December 2013





### **CORE Organic Plus Call**

**Compiled applicant information sheets – for partnering search** 

# **Thematic research area 2**

# Functional biodiversity to improve management of diseases, weeds and pests





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES

#### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	YES
Functional biodiversity to improve management of diseases, weeds and pests	YES
Livestock health management systems, including breeding	NO
Ensuring quality and safety of organic food along the processing chain	NO

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Research intended to find and validate solutions to improve the buffering capacity of the soil towards replant diseases in fruit growing (pome fruit, ligneous small fruits, strawberries, ...) and/or to improve the potential of a plant to aboveground pathogens and pests. The increase of functional diversity is intended to augment the number of natural enemies in the fruit orchard/plantation and/or to attrack natural enemies to the fruit plants.

### What are the strengths of your research institute? (max. 5 lines)

70 years experience in fruit research by a diversified group of specialists (entomology, fytopathology, ...). Very close contact to growers and located in the middle of the major fruit growing area of Belgium. Excellent research facilities including labs, climat chambers, cages, tunnels, glasshouses and orchards.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

- 7<sup>th</sup> Frame Biocomes (On development of natural control strategies against pests and diseases)
- Research project on yeasts and bacteria against storage diseases
- Research project on augmentation of natural enemies against psyllids in pear orchards
- Control of pome fruit pests with entomopathogenic nematodes
- Understanding and improving the beneficial effects of earwigs in orchards
- Adapting the orchard environment to augment the presence of natural enemies
- Natural control of spider mites in strawberry
- Natural control of thrips in strawberry
- Alternatives for chemical soil sterilants

### What kind of partners are you looking for (as regards field of competence, country....)?

Public research or private partners looking for validation or practical testing and/or product development with the aim to bring practical solutions with added value to the farmers

Please provide your contact details:

First and last name: Dany Bylemans Research Institute: pcfruit npa Email: dany.bylemans@pcfruit.be Phone number:





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/<del>NO</del>

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

We want to address research on management practices that enhance FAB on different levels (landscape – farm – field – crop) and increase resilience in organic cropping systems. Some research questions we want to explore further are: how can we better characterize and demonstrate natural pest regulation and its relation with crop and landscape management; what is the role of soil biodiversity in disease control; how to integrate management practices in agri-environmental or 'greening' measures (CAP), ...

### What are the strengths of your research institute? (max. 5 lines)

Inagro is a leading centre for applied research and advice for Flemish agriculture. It has a separate department for organic agriculture and its own organic research farm. The department's research and advisory program covers issues including variety choice, weed control, pest and disease management and soil fertility. Inagro is involved in many national and European research projects involving field experiments and dissemination to farmers.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

Current relevant research activities at Inagro:

- Research/ dissemination project on the biological control of wireworms and leather jackets (2013-2014);
- Regional dissemination project on the integrated pest management of cereal aphids and cereal leaf beetle with focus on the role of natural enemies and flower rich field margins.
- Field border management to encourage biodiversity and boost natural enemies is continued on the organic experimental farm of Inagro.

Relevant past research projects:

- Interreg IIIB-project 'Farmers for Nature' (2005-2008): leverde inzicht in de diversiteit aan (nuttige) insectengroepen langs perceelsranden en hun mogelijkheden voor een natuurlijke plaagonderdrukking in de teelt van kolen en tarwe.
- Leader+ Brugs Ommeland 'Flower rich field margins for a sustainable pest control' (2008);
- Interreg IV Grensregio Vlaanderen-Nederland (01/11/2010 31/10/2013) 'Solabio' (Species and landscapes as carriers for biodiversity): Inagro conducted a study for the Flemish Field Agency to examine the effects of field margin management on natural pest control in cereals.
- A regional scientific research project on optimizing the application of entomopathogenic nematodes to control some selected pests in vegetables (2009 2013).

### What kind of partners are you looking for (as regards field of competence, country....)?

Partners with relevant competence in monitoring pests, natural enemies, diseases and soil organisms and/or who have current research activities in exploring the role of functional biodiversity for natural pest and disease regulation in cropping systems.

Please provide your contact details:

First and last name: Femke Temmerman Research Institute: Inagro Email: femke.temmerman@inagro.be Phone number: +32 (0)51 27 32 51





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

<u>YES</u>/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	х
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	х
Ensuring quality and safety of organic food along the processing chain	

Which research questions do you specifically want to address in your project? (max. 5 lines)

As a network for organic food and farming research and knowledge in Flanders, the FORK-network brings together researchers and practitioners. The network stimulates bottom-up driven research for OFF. The network consists of 3 subnetworks: <u>NOBL</u>: Network for Organic Food and Farming Research, the overall network; <u>CCBT</u>, Coordination Centre for applied research and extension on organic agriculture and BBN, 8 farmers' networks for specific organic farming sectors.

### What are the strengths of your research institute? (max. 5 lines)

The researchers of the network have different expertise and are active in different research disciplines. The ILVO-social sciences unit coordinates the NOBL network and can help in finding the right partners in Flanders. As research unit, the unit gained, in the past few years, experience with participatory processes and research and the developing of research models that ensure a better valorisation of research results to farms. Learning processes where farmers are involved in innovative actions are one of the unit's key research lines.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

- The FORK-network works on improving information flow and knowledge between researchers and practitioners, deployment of existing scientific and practical knowledge, and stimulating research activities for the organic sector in Flanders. Where possible the FORK-network works more and more transnational in the dissemination of research results and knowledge exchange.
- FP7-project SOLID: ILVO-Social sciences unit is work package leader in WP6 Socio-economic evaluation of novel strategies in organic and low-input dairy farming. <u>http://www.solidairy.eu/</u>)
- National funded project 'bio in beeld': the ILVO-Social Sciences unit will develop a systemoriented participatory methodology to formulate indicators tailored to organic farms that can support farmers in their decisions to greater sustainability and competitiveness. This project is running in collaboration with members of the FORK-network.

### What kind of partners are you looking for (as regards field of competence, country....)?

The FORK network and/or ILVO-Social Sciences Unit can support research consortia in participatory research development, knowledge dissemination, ..

### Please provide your contact details:

First and last name: Lieve De Cock Research Institute: ILVO – Social Sciences Email: lieve.decock@ilvo.vlaanderen.be Phone number: +32 9 272 23 52





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES<del>/NO</del>

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Understanding how in field biodiversity or in the immediate periphery may affect plant health. Evaluate different useful crops for their beneficial effects in functional biodiversity. Assessment of crop health and growth after enhancing the fields' biodiversity by soil management or by establishment of flower margins, cover and mixed crops. Evaluating new varieties from cover crops in the field to assess whether they enhance the functional biodiversity in favour of the main crop.

### What are the strengths of your research institute? (max. 5 lines)

- 3-year old multifactor field experiment under organic conditions with different levels of soil quality, established by differences in nutrient input, soil tillage and the use of soil improvers;
- research lab methods/ techniques for assessment of plant health and disease resistance;
- Monitoring of beneficial and plague insect populations, effects of natural plague control;
- Breeding programs with large collections of varieties from forage grasses, clover crops, vegetables, phacelia, white mustard, fodder radish, turnips, sainfoin, Lotus and other crops.

Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

- Partner in the European CORE Organic II TILMAN-ORG project concerning adopting conservation tillage techniques in organic agriculture;
- ADLO project assessing characteristics of a large number of cultivars of vegetables (leek, celery, cauliflower and chicory) for the benefit of organic farming;
- National funded project (UGent-ILVO) studying the effect of different red clover varieties on the attraction of natural insect pollinators;
- Interreg IVa SOLABIO Natural plague control with flower margins in cereals;
- ADLO project (ILVO-PCS) about integrated crop protection in ornamental horticulture;
- PWO project (Hogent-ILVO) about monitoring of thrips on strawberries and sustainable control by crop management and flower margins.

### What kind of partners are you looking for (as regards field of competence, country....)?

Institutes which are running field experiments with regard to soil and crop management in organic agriculture and with competences in field evaluation of crops that suppress weeds and that stimulate populations of beneficial organisms such as insect predators and pollinators.

Institutes with competences in natural genetic diversity, in new crops that support a high degree of functional biodiversity and in disease resistance research with bio-tests.

#### Please provide your contact details:

First and last name: Koen Willekens; Hervé De Clercq; Hans Casteels Research Institute: ILVO-Plant Sciences Email: koen.willekens@ilvo.vlaanderen.be; herve.declercq@ilvo.vlaanderen.be; hans.casteels@ilvo.vlaanderen.be Phone number: ++32 92 72 26 73; ++32 92 72 28 50; ++32 92 72 24 56





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	*
Livestock health management systems, including breeding	*
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Ecosystem services associated to multi-species grasslands, characterised by high functional biodiversity, promoted under organic farming, need to be specified especially through their impact on animal performances, health and welfare and on animal product quality. This would be the aim of this project.

### What are the strengths of your research institute? (max. 5 lines)

Expertise in the follow up and characterisation of multi-species grasslands and in the analysis of animal – plant interactions : sward quality characterisation, intake quantification and composition, (e.g. using NIRS), associated with animal production, animal welfare evaluation and animal product quality evaluation (molecule of interest enrichment as equol content in milk, fatty acid profile, ....).

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

- Multi-species grasslands mobilised in organic systems : impact on floristic diversity and yield levels and stability;
- Impact of sward characteristics and management on animal health (gastrointestinal worms burden);
- Impact of sward characteristics and management on animal product quality (equol, fatty acid contents, ...);

### What kind of partners are you looking for (as regards field of competence, country....)?

Integrate a consortium that is interested by the expertises developed above.

Please provide your contact details:

First and last name: Didier Stilmant Research Institute: Walloon agricultural Research Centre Email: d.stilmant@cra.wallonie.be Phone number: 00 32 479 21 32 83





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	*
Functional biodiversity to improve management of diseases, weeds and pests	*
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

We are interested on projects aiming to link cropping practices in organic farming and soil fertility. More especially we want to focus on nitrogen, phosphorus dynamic and soil biological activity in crop associations, in time and space, involving legumes species : cereal-pea association, grass-clover association, annual crops sown directly in clover cover or with annual legume species.

### What are the strengths of your research institute? (max. 5 lines)

Expertise in crop associations and in multi-species grasslands mobilising legume species, in organic fertiliser valorisation, in soil biological, physical and chemical fertilities.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

- Soil tillage and sowing pratices and crop residues management : impacts on soil fertility and crop developmentManure, compost and slurry management with a special interest on the articulation between animal and crop production in organic systems;
- Cereal pea associations;
- Cereal crops sown in clover cover;
- soil fertility: management of crop residues and intercropping for stockless farms (N, P and OM, ...)
- Multi-species grasslands mobilised in organic systems : impact on floristic diversity and yield levels and stability.

### What kind of partners are you looking for (as regards field of competence, country....)?

To cover soil and system diversities in terms of crops associations and crop management under organic schemes.

Please provide your contact details:

First and last name: Didier Stilmant Research Institute: Walloon agricultural Research Centre Email: d.stilmant@cra.wallonie.be Phone number: 00 32 479 21 32 83





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES

#### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	no
Functional biodiversity to improve management of diseases, weeds and pests	yes
Livestock health management systems, including breeding	no
Ensuring quality and safety of organic food along the processing chain	no

### Which research questions do you specifically want to address in your project? (max. 5 lines)

To assess the impact of increasing agrobiodiversity on functional biodiversity on the farm level/landscape level by introduction of suitable crop varities, which come into flowering during their cultivation, thus providing potential food resources to natural enemy guilds which leads to better pest control. These flowering crops (oilseed, medical plants and herbs, soil improvers, human nutrition) are considered as niche market crops, especially suitable for organic production.

### What are the strengths of your research institute? (max. 5 lines)

The Institute for Biological Control of the Julius Kühn-Institut is an unique research institute developing plant protection measures based on biological control agents (beneficial arthropods and nematodes, viruses, entomopathogens, antagonistic bacteria, plant extracts). In cooperation with different stakeholders (farmers, SMEs, extension services, universities) innovative holistic research is carried out to deliver solutions for integrated and organic agriculture.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

Several current research projects of the Working group "Beneficials & entomology" target beneficials (mainly parasitoids) in fruit crops by identification of candidate species, study of their efficacy and potential measures to increase their impact, especially by use of nectar and pollen ressources. Other research projects deal with the identification and testing of new natural enemies and other antagonists for control of plant pests and diseases in different cropping systems (perennials, horticulture, ornamentals, arable crops etc.). Our efforts aim also on finding biocontrol solutions on new invasive pests. Research projects are nationally funded or EU-funded.

### What kind of partners are you looking for (as regards field of competence, country....)?

SMEs producing seeds for flowering crops in order to compare and assess suitability of particular varities for the enhancement of natural enemies (delivery of nectar and pollen). Farmer associations/extension services which may help to outline cultivation instructions Research institutions of several countries (France, Italy, Switzerland, Poland) which target also on the enhancement of natural pest control and/or other benefits of cultivation of these nice market plants (soil fertilisation, fumigation, particular valued-crop systems), especially concercing landscape dominating crop systems (e.g. cereals, apple, olive).

Please provide your contact details: First and last name: Dr. Annette Herz Research Institute: Institute for Biological Control, Julius Kühn-Institut, Heinrichstr. 243, 64287 Darmstadt Email: annette.herz@jki.bund.de Phone number: 0049-6151-407236





### **CORE Organic Plus Call**

### **Applicant information sheet – for partnering search**

Will you attend the Brokerage Event on 18 December?

NO

#### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	Yes
Functional biodiversity to improve management of diseases, weeds and pests	Yes
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

Which research questions do you specifically want to address in your project? (max. 5 lines)

In plant/soil interaction, the concept is to assess the soil biological, chemical and physical parameters based on the crop-mix/rotation/field history and identify the factors affecting the plat-soil environment. Modelling approaches will be used to assess the plant and soil factors affecting plant-soil environment in arable production systems and the tool developed can be used as a management tool for farmers and advisory services.

This is my idea of the project and I am very open and flexible to other ideas. We can discuss and see if we can complement each other

What are the strengths of your research institute? (max. 5 lines)

Our strengths are in plant-soil atmosphere system modelling, soil organic carbon dynamics in managed production system, ecosystem service quantification and valuation, intercropping systems with legumes, ecological stoichiometry, use of GIS modelling, eMergy synthesis, climate change and food security issues

Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

We have a long term site on carbon neutral farming with integration of food, fodder and energy crops and managed organically as potential case study to study the long term dynamics of plant and soil environment. Right now, we have a EU project (SmartSoil) looking at soil carbon dynamics in common arable and mixed production systems in EU and assessing different production practices for their potential to build up soil carbon and its associated benefits in terms of rooting depth, soil water content and moisture retention.

What kind of partners are you looking for (as regards field of competence, country....)?

This would really depend on the proposal we work on and the only way to find out is to mail each other and find out. So feel free to contact me and see if we can complement each other in terms of expertise. For the present project proposal, I am looking for partners with expertise in plant genetics and breeding and working with materials for low input production systems like organic farming, plant and soil process modellers with access to long terms sites on arable plant production with organic management. Any interested can contact me and we can work out your input as the proposal takes shape

Please provide your contact details:

First and last name: Bhim B Ghaley Research Institute: Faculty of Science, University of Copenhagen Email: bbg@plen.ku.dk Phone number:+45 52811711





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES

#### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	Х
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	Х
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Weeds and Diseases control attending to crop rotation and agro-climatic conditions Vegetal breeding (potato and corn) and variety selections (cereal and oilseed rape) for abiotic and bi otic diseases control. Biological indicators of soil health

"Cradle to cradel" innovation in farm

### What are the strengths of your research institute? (max. 5 lines)

NEIKER-Tecnalia, the Basque Institute for Agricultural Research and Development, is a nonprofit state-owned company assigned to the Basque Government, bases its activities on research and technology transfer in the agricultural sciences and foodstuffs field and focuses on adding value to the agrofood sector. A highly qualified specialization focused on 2 business units:• Agricultural innovation and Environment and natural resources. The organisation is divided into six scientific departments that focus their R+D activities on projects within: **The Department of Plant Production and Protection, Animal production, Animal Health, Ecosystems and Ecotechnologies** 

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

Projects, in relation with research questions expressed above

Selected within the LIFE + program of the European Comisión

**SEEDCAPITAL**. The comprehensive use of rapeseed can contribute to reducing greenhouse gases, to obtain healthier milk and reducing costs by introducing this crop rotation.

**REGEN FARMING.** Identify, demonstrate and transfer the benefits of regenerative farming practices to achieve a more effective and sustainable management of pastoral systems contributing to the improvement soil quality

SOILMONTANA. towards sustainability in agricultural practices. Biological indicators of soil health

Others:

**LOCALVAR, MAIZRF, PAPAGEN**, .... Breeding and selection of new varieties for organic management. Basque and Spanish Government grantts

**VITSAN, ARDAGAIA, ESTAVISO**,... Agro-meteorology techniques for diseases and pest control. Basque and Spanish Government grantts

What kind of partners are you looking for (as regards field of competence, country....)?

European partners in organic management in watered crops Agrometeorology Crop Sustainability indicators

Please provide your contact details:

First and last name: Anabel de la Peña Research Institute: INIA Email: anaisabel.delapena@inia.es Phone number: +34913478776. Mobile: +34686368184





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	YES
Functional biodiversity to improve management of diseases, weeds and pests	YES
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

- Beneficial Microorganisms
- Arbuscular mycorrhizal fungi
- Soils Microbial indicators
- Sustainable Agriculture

What are the strengths of your research institute? (max. 5 lines)

Sixty years of experience working directly with local growers, farmers and ranchers to modernize and broaden the crop possibilities in the Canary Islands, up to and including field extension work. Established research ties with South and Central America, Macaronesia, and with recently several emerging African countries. Fully equipped labs and experimental plots (chiefly on the island of Tenerife). Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

- Transferencia de I+D+i para el desarrollo sostenible del cultivo del plátano en las RUPs MAC. BIOMUSA MAC/1/C054
- Mejora de la producción y calidad de variedades de tomate tradicionales mediante la aplicación de hongos micorrícicos, bajo diferentes sistemas de cultivo. RTA2011-00110
- Bases tecnológicas para una producción eficiente y sostenible de la papaya en climas subtropicales. RTA2012-00107
- Desinfectación de papas utilizando dióxido de carbono: Optimización como tratamiento de cuarentena de la polilla guatemalteca (*Tecia solanivora*). RTA2011-00125
- Alleviating abiotic and biotic soil constrains by combining arbuscular mycorrhizal fungi with banana and plantain micropropagation systems. INCO-DC-96/2239.

What kind of partners are you looking for (as regards field of competence, country....)?

R&D institutions and companies working with tropical and subtropical fruit crops, including tomato, and forage plants, with interest in developing sustainable, organic lines particularly for small holdings.

Please provide your contact details:

First and last name: Maria C. Jaizme-Vega Research Institute: Instituto Canario de Investigaciones Agrárias Email:mcjaizme@icia.es Phone number:+34 922 923 339





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

NO

#### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	Х
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

WEED MANAGEMENT IN ORGANIC CROP PRODUCTION:

Prevention and control, Allelopathy, natural products, phytotoxic green manures, physiological effects on weeds and crops, fate of allelochemicals in the agroecosystem.

### What are the strengths of your research institute? (max. 5 lines)

Education and Research. <u>http://www.uvigo.es/uvigo\_en/index.html</u>. Our main research group was created in 2005. During these years, collaboration has been consolidated and research converged in innovative common lines. We have a multidisciplinary character and researchers are involved in three main areas: Soil Science and Agricultural Chemistry; Plant Physiology; and Plant Production. <u>http://webs.uvigo.es/agrobiologia/index.html</u>

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

-Maize breeding towards abiotic stress and competition with weeds (National funds). -Conversion from conventional to ecological production in forage systems: evolution of soil quality indicators (National funds).

- Comparative study of ecological vs. conventional forage rotations: Evolution of agronomic and ecophysiological parameters during conversion to Organic Agriculture (National funds).

-Evaluation of forage maize tolerance/resistance towards biotic and abiotic stress conditions of the Cantabrian Coast (Regional funds)

See others at <a href="http://webs.uvigo.es/agrobiologia/index.html">http://webs.uvigo.es/agrobiologia/index.html</a>

### What kind of partners are you looking for (as regards field of competence, country....)?

-European research partners with excellence in chemistry, isolation and identification of plant origin natural compounds, as well as the fate of secondary metabolites in the agroecosystem/environment.

-European research partners able to carry out field experiments on ecological crop rotations including green manures.

-Companies and/or Spin-offs interested in ecological weed management and/or plant originnatural products.

Please provide your contact details:

First and last name: Nuria Pedrol Research Institute: University of Vigo, Faculty of Biology, 36310-Spain Email: pedrol@uvigo.es Phone number: +34 986812616





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/<mark>NO</mark>

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

# Which research questions do you specifically want to address in your project? (max. 5 lines) I'm interested in two fields

**1.-** Ecological infrastructures: Enhancing Conservation Biological control of pests using hedgerows and ground cover in organic citriculture.

What are the strengths of your research institute? (max. 5 lines)

- Staffs are expert entomologists with great experience in Biological control of pests.
- Belonged to a strong institution (UPV)
- Experience in research in Applied Ecology.

## Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

### Our team has been involved in several national and international projects, for example:

1.-Marie Curie Actions- International Research Staff Exchange Scheme (IRSES). 2011-2014.IPRABIO: Integrating new practices in programs of Biological Control against Agricultural pests. Directed by: DI. Thibaut Malausa (INRA, France).

2.- ESTUDIO DE ARTRÓPODOS BIOINDICADORES EN EL TANCAT DE LA PIPA TRAS SU RESTAURACIÓN PAISAJÍSTICA Y DESARROLLO DE UNA GUÍA DIDACTICA DE ARTRÓPODOS PARA USO DIVULGATIVO (2009-2013)

3.- Primeros estudios sobre técnicas sostenibles en el cultivo de arroz. Estudio de plagas y enemigos naturales en arrozales y zonas adyacentes (2011)

4.- PROGRAMME DE LUTTE INTÉGRÉE CONTRE L'NSECTE INVASIF *Tuta absoluta* UN NOUVEAU RAVAGEUR NUISIBLE DE LA TOMATE. (AECID) (2009-2011)

5.- Título del proyecto: Control biológico y umbrales de tratamiento del Piojo Rojo de California Aonidiella Aurantii (Homoptera:Diaspididae) en cítricos.Mº DE EDUCACIÓN Y CIENCIA (2005-2008).

What kind of partners are you looking for (as regards field of competence, country....)? - Specialists in Ecological infraestructures and biological control in other countries of the UE

Please provide your contact details:

First and last name:ROSA VERCHER Research Institute: INSTITUTO AGROFORESTAL DEL MEDITERRANEO-UNIVERSITAT POLITÈNICA DE VALÈNCIA (IAM+UPV) Email:rvercher@eaf.upv.es Phone number:0034963879264





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	X
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

-1) Which are the farmer's innovations (technological, knowledge based, organisational and social) dealing with functional biodiversity?

-2) Which are the strategies to improve crop diversity (crop genetic diversity, legumes, cover-crops, associated crop and intercropping) and performances in organic arable crops and vegetable productions?

-3) How to design by using agro-ecological approaches and to assess resilient and sustainable cropping systems (ex. agroforestry systems)?

### What are the strengths of your research institute? (max. 5 lines)

-ITAB, the French research institute of organic farming, aims to connect research activities and stakeholders in order to develop organic agriculture.

-3 main activities: networking, research and development, and dissemination (e.g. publications, conferences and workshops).

-8 national working groups on: livestock, arable crops, horticulture, winegrowing and fruit crops, organic seeds and plant breeding, soil management, crop protection and animal health, quality (product and food chain).

-ITAB, it is also: 30 years of experience in organic research, a close connection with 7 organic experimental sites (GRAB, CREAB, PAIS, CIVAM Bio66, CEV, Archigny, Thorigné d'Anjou) and 2 regional research centers (IBB, Pôle bio), 50 full time equivalent staff, 600 free technical booklets on line (<u>www.itab.asso.fr</u>), 30 projects developed during the last 10 years...

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

ITAB has experience with European projects. It is a partner:

- in the ongoing SOLIBAM FP7 project (Strategies for Organic and Low Input Integrated Breeding and Management - <u>www.solibam.eu</u>; 2010-2014), which aimed to develop breeding approaches integrated with management practices to improve the performance, quality, sustainability and stability of crops adapted to organic and low-input systems.

 - in COBRA Core Organic II project, to enhance plant breeding activities focused on diversity within varieties to cope with robustness of crop and resilience of cropping systems.
-in the COST Biogreenhouse.

ITAB was a partner of the ORWINE FP6 project and was involved in the Cost programme 860 SUSVAR. ITAB is a member of ECO-PB (European Consortium for Organic Plant Breeding) and ECO-AB (European Consortium for Organic Animal Breeding) boards.

At the national level, ITAB's engineers are involved in 14 research projects on various issues connected with organic farming such as: sustainable soil management, resilient and sustainable farming system's design, benefits of crop rotations and innovative crop management (RotAB, InnovAB), agroforestry, functional biodiversity, methods to assess organic product's quality, animal health and welfare, organic plant breeding and seed production, copper use reduction, plants extracts and crop protection.

What kind of partners are you looking for (as regards field of competence, country....)? All kind of partners are welcome: research institutions, SMEs, organic farmers' networks.

#### **Contact details:**

First and last name:	Frederic REY
Position:	Research & International partnerships
Research Institute:	ITAB - French Research Institute of Organic Farming - www.itab.asso.fr
Email:	Frederic.Rey@itab.asso.fr
Phone number:	+ 33 (0)4 68 47 85 36





### **Applicant information sheet**

Will you attend the Brokerage Event on 18 December? be represented by a colleague of INRA (Servane Penvern) NO, we will

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	XXX
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

>> Topic 2: Developing improved strategies for soil and resource management

Some ideas... How to improve crop production in organic farming systems, using the concept of ecological intensification?

-Analysis and simulation of cover crops and green manures on Organic Systems fertility; considering both physical and chemical issues (OM status, mineral cycling, interaction between plants in association: facilitation, competition, allelopathic effects against weed germination and emergence...)

-Evaluation, on the basis of root system functioning, of plants foraging and mining strategies to acquire nutrient with low availability (chemically protected or low accessibility of P in deep soil horizons)

-At farm system level: design, ex ante and ex post assessment of Ecological Intensification of the Stockless Organic Experimental Farm of CREAB in Auch (SW, France) in order to improve its sustainability.

### What are the strengths of your research institute? (max. 5 lines)

Specific Research Facilities

-Strong and wide agronomic competences (soil-plant interactions, C and N cycles, design of innovative cropping systems, cover cropping, intercropping, P cycle in soil-plant, ...) -Equipment's and specific software's for leaf and root traits measurements (WinfoliaTM, WinrhizoTM) -A long term stockless organic experimental farm (1999-) which tests short (wheat-soya bean) and long (wheat-sunflower-wheat-faba bean) rain fed rotations (60 ha).

-Organic farms network in SW France (Midi Pyrenees)

-A long term (45 years) fertilisation experiment with large P gradient (0.5ha)

-Chemical Analysis lab (NPK, soil/plants) and isotopic compositions <sup>15</sup>N/<sup>14</sup>N through partnership with local university.

-Soil-crop modelling competences for light, carbon, water and Nitrogen cycles (STICS model).

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

-ANR MicMac-design project : design and quantitative assessment of innovative cropping system based on ecological intensification (<u>http://www6.inra.fr/micmac-design\_eng/</u>) -FP6 EU Grain legume project

- post-doc FUN-LEG in evaluation The overall objective is to characterize the biological functioning of a wide range of native or selected legumes and to estimate their value in terms of ecosystem services (high quality forages, cover crops, green manures and biological soil fertility).

- National project CASDAR-Innov AB (partners: ISARA et ARVALIS) (2013-2015) Nutrient (N and P) dynamics under low inputs Organic crop systems.

- Ecological Intensification of the Stockless Organic Experimental Farm at the CREAB experimental research center.

-Increase the N availability of N in stockless cropping systems using relevantly legumes as a key source of N

#### What kind of partners are you looking for (as regards field of competence, country....)?

Expertise in biological nutrient cycling (N symbiosis, Organic P)

Plant functional characterization with focus on Root functioning in resource acquisition (micorhization)

Assessment of sustainability at the farm level

Mixed farming systems with crops and animals

#### Please provide your contact details:

First and last name: Eric Justes Research Institute: UMR AGIR INRA TOULOUSE, France VASCO Group Email: justes@toulouse.inra.fr Phone number: phone: +33 (0)5 61 28 52 50





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

<del>YES</del>/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

How to sustain functional biodiversity in cropping systems through landscape and agroecological practices management?

Importance and quality of semi-natural elements as overwintering sites for natural enemies, efficiency and quickness of field colonization by natural enemies in link with density of semi-natural elements network and agroecological practices.

### What are the strengths of your research institute? (max. 5 lines)

**ISARA Lyon** is a private university (850 students – 110 employees) developing research and high education programs. Strength for CORE ORGANIC + are :

- 20 years' experience in organic farming research covering a range of topics both in the field of agronomy and agroecology (7 academics, 2-3 PhD students/year) and social sciences (6 academics, 2-3 PhD students/year),
- Acting on EU education program on Agroecology (Msc level) including on-going research programs on agroecology
- a long-term experience on EU (4 to 7 Framework program, SEER, CORE-Organic I and II) and national projects on organic research with 20 projects implemented for the last 15 years,
- a long-term strategy on scientific publication (more than 50 papers on organic research) and extension activities (education program for professionals, more than 25 popular articles)

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

ISARA Lyon has a long experience with European projects:

- Co-coordination of the ongoing CORE-ORGANIC II TILMAN Org project (Integrating reduced tillage and green manures in organic cropping systems 2011-2014) <u>www.tilman-org.net</u>,
- Coordination of the CORE ORGANIC I AGTEC-Org project (Agronomical and technological ways improving organic baking wheat 2007-2011) <u>www.agtec.coreportal.org</u>
- Participation in 5 EU projects QLIF Improving quality and safety and reduction of cost in the European organic and 'low input' supply chains' QualityLowInputFood 2005-2008; Making agriculture sustainable SEER 1999-2001; Effects of the CAP-reform and possible further developments on organic farming in the EU (FAIR-96-1794) 1998;; On-farm development and evaluation of organic farming systems: The role of livestock and agro-forestry (AIR 852) 1993-1996; Coordination of Viable organic stockless systems (AIR 576) 1995-1996

At the national level, ISARA is currently involved in 13 national research projects on various issues connected with organic farming such as: conservation soil management, resilient and sustainable farming system's design, benefits of crop rotations and innovative crop management, wheat quality functional biodiversity, revision of organic regulation, organic in sensitive areas (water protection, mountain areas).

#### What kind of partners are you looking for (as regards field of competence, country....)?

We are looking for research institutes and SME specialised on plant protection, biocontrol, landscape design

#### Contact details:

First and last name:	Aurélie FERRER or Christophe DAVID
Position:	Associate professor / Executive director
<b>Research Institute:</b>	ISARA Lyon - <u>www.isara.fr</u>
Email:	ferrer@isara.fr or davidc@isara.fr
Phone number:	+ 33 (0)6 10 12 62 86





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/<del>NO</del>

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	Х
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

1) How to design and assess resilient and sustainable cropping systems based on agro-ecological approaches?

2) How to identify and enhance the farmers' innovations (technological, knowledge based, organisational and social) dealing with improved strategies for soil and resources management, or dealing with functional biodiversity?

More specifically:

- Arable crops: what is the impact of agro-ecological practises (such as increase of legumes/cover crop/inter-crop in crop rotation) on evolution of soil fertility? On evolution of weeds?
  - Perennial crops: how to characterize soil quality (biological, physical... properties) and how to assess soil management in fruit yards or vineyards and their impacts on soil fertility.

### What are the strengths of your research institute? (max. 5 lines)

### Arable crops

**ITAB** coordinates a network of 12 long-term experiments (LTE) in organic farming, assessing stockless arable crop systems (named "RotAB network"). These LTE are likely to supply data to European Core Organic projects:

- on assessment of soil fertility (N, P, mycorhization...),
- on weed evolution according to crop management (cover/inter-crop...),
- on impact of/on functional biodiversity.

### Perennial crops

**ITAB** is able to set up and coordinate an on-farm experimentation network in perennial crops.

**-ITAB**, the French research institute of organic farming, aims to connect research activities and stakeholders in order to develop organic agriculture.

-3 main activities: networking, research and development, dissemination (e.g. publications, conferences and workshops).

-8 national research committees on: livestock, arable crops, horticulture, winegrowing and fruit crops, organic seeds and plant breeding, soil management, crop protection and animal health, quality (product and food chain).

-ITAB, it is also:

a 30 years' experience in organic research,

- a close connection with 7 organic experimental stations (GRAB, CREAB, PAIS, CIVAM Bio66, CEV, Archigny, Thorigné d'Anjou) and 2 regional research centers (IBB, Pôle bio), bringing together 50 full-time equivalent staff,

- 600 free technical booklets on line (www.itab.asso.fr),
- 30 projects implemented for the last 10 years.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

ITAB has experience with European projects. It is a partner:

- in the ongoing SOLIBAM FP7 project (Strategies for Organic and Low Input Integrated Breeding and Management - <u>www.solibam.eu</u>, 2010-2014), which aims to develop breeding approaches integrated with management practices to improve the performance, quality, sustainability and stability of crops adapted to organic and low-input systems.

- in COBRA Core Organic II project, to enhance plant breeding activities focused on diversity within varieties to cope with robustness of crop and resilience of cropping systems.

-in the COST Biogreenhouse.

ITAB was a partner of the ORWINE FP6 project and was involved in the Cost programme 860 SUSVAR. ITAB is a member of ECO-PB (European Consortium for Organic Plant Breeding) and ECO-AB (European Consortium for Organic Animal Breeding) boards.

At the national level, ITAB's engineers are currently involved in 14 national research projects on various issues connected with organic farming such as: sustainable soil management, resilient and sustainable farming system's design, benefits of crop rotations and innovative crop management, agroforestry, functional biodiversity, methods to assess organic product's quality, animal health and welfare, organic plant breeding and seed production, copper use reduction, plants extracts and crop protection.

### What kind of partners are you looking for (as regards field of competence, country....)?

All kind of partners are welcome: research institutions, SMEs, organic farmers' networks.

### **Contact details:**

First and last name:	Laurence FONTAINE
Position:	Project manager. Head of technical department.
Research Institute:	ITAB - French Research Institute of Organic Farming - <u>www.itab.asso.fr</u>
Email:	laurence.fontaine@itab.asso.fr
Phone number:	+ 33 (0)2 41 18 61 56





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/NO

#### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	х
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

# Which research questions do you specifically want to address in your project? (max. 5 lines) <u>We have two propositions:</u>

#### On wheat : from COBRA and SOLIBAM (and other regional programmes)

In previous projects (COBRA, SOLIBAM), we have created several kinds of diverse/heterogeneous populations (Composite Cross Populations (CCP), dynamic mixed populations) from the same set of landraces. In a Participatory plant Breeding (PPB) programme (COBRA, SOLIBAM), we also have developed populations derived from two-parents crosses - using either landraces, old varieties or modern varieties bred for OA - and submitted to farmers selection in a network of farms all over France. The aim would be to compare the interest of different strategies (pure landraces vs mixtures or CCP), different level of initial diversity (type of parents used for crosses) and different types of selection (natural selection and farmers' selection) for robustness, resilience and quality in the framework of on-farm breeding and participatory researches. We will assess crop performance of the different populations in diversified growing systems across different spatial and temporal scales.

#### On beans : from SOLIBAM

Participatory and on-farm research to assess the role of diversity (plant and microorganisms) as factor of robustness and plant health (symptoms of major fungal, viral and bacterial diseases). Analysis of microorganisms on seed (pathogenic microorganisms and beneficial microorganisms from on-farm production) and root symbiosis (AMF and Rhizobium) based on on-farm experiments in several European countries, will allow for an insight into the interactions of microorganisms and plant diversity, and then, the role of microorganism diversity in relation to crop health in organic bean production systems. A first part of the study has been performed since 2013 in the framework of a PhD and SOLIBAM, in collaboration with several European partners (UNIPG, ESAC, ULG and IBLA). This kind of study can be enlarged to other species.

### What are the strengths of your research institute? (max. 5 lines)

The INRA department of Sciences for Action and Development is dealing with multidisciplinary approaches of agricultural and food systems. The main research activities of our team are focused on participatory research to enhance cultivated diversity for organic and low input agricultures. The participatory plant breeding began

in 2001. Now, our team aims at understanding the impact of diversity (genetic diversity and crop management) on performance, health and quality of several arable (wheat, maize, buckwheat...) and vegetable crops (bean, tomato, broccoli...), in interaction with farmers' networks. The DEAP (Diversity, Evolution and Adaptation of Populations) team from the INRA department Biology and Plant Breeding at Le Moulon complements these activities with a focus at the genetic level. Our strength is to make the bridge between knowledge from theoretical population and quantitative genetics and experimental studies on the on-farm dynamic management of genetic resources and on participatory plant breeding (PPB). In particular we have developed network-based methods to analyze genetic diversity data, statistical Bayesian methods to handle unbalanced fields trials in PPB and a specific database to store seed circulation, phenotypic and molecular data.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

The INRA-Rennes team has previously coordinated a FP6 project, Farm Seed Opportunities (2007-2010). Now, INRA-Rennes is leading (and INRA-Le Moulon is responsible for WP2) SOLIBAM (Strategies for Organic and Low Input Integrated Breeding and Management, (http://www.solibam.eu/), a FP7 project (2010-2014) which aimed to develop breeding approaches integrated with management practices to improve the performance, quality, sustainability and stability of crops adapted to organic and low-input systems in Europe and Sub-Saharan Africa. The underlying hypothesis is that diverse populations are more resilient to stress and can therefore better adapt to environmental variation. Both INRA teams are also partners in COBRA, a Core Organic II programme, to enhance our breeding activities focused on diversity within varieties to cope with robustness of crop and resilience of cropping systems (wheat).

Other national and regional projects brought other funds to enlarge the concerned species (as buckwheat), to enhance transdisciplinarity or to connect with civil society interest.

# What kind of partners are you looking for (as regards field of competence, country....)? Partners already interested in collaborating with us:

1 – Dept. of Agriculture, Food and Environment - University of Pisa, Italy

On topic 1: A multidisciplinary approach at field and farm level will allow us to link soil health factors, such as beneficial microbiota, in particular beneficial mycorrhizal symbionts, have a key role in organic crop production and a strong impact not only on crop nutrition and soil fertility, but also on the quality and nutraceutical value of food products.

They could collaborate (as in SOLIBAM) in order to improving the understanding of the interaction between soil, plant and microbiota under different organic farming systems and management practices (such as tillage systems, recycling of organic matter etc.).

2 - Università degli Studi di Perugia, Italy

On topic 2: To TEST several kinds of "mixtures" vs Controls (of bean, barley and broccoli) to assess the influence of different environments on adaptation and to evaluate crop genetic diversity level (heterogeneous vs homogeneous materials) on yield/yield stability/plant health/product quality under different organic conditions.

**Broadening the collaboration (either topic 1 or 2):** with team working on strategies for diversity at different level (varieties, species, fields) to evaluate the impact on performance, health and quality, on cereals, beans, tomato, broccoli, but also on maize or buckwheat.

Please provide your contact details:

First and last name: Véronique Chable Research Institute: INRA Email: chable@rennes.inra.fr Phone number: 33 223 48 70 49 (mobile 33 608 279 679)

First and last name: Isabelle Goldringer Research Institute: INRA Email: isa@moulon.inra.fr Phone number: 33 1 69 33 23 70




### **Applicant information sheet – for partnering search**

### Will you attend the Brokerage Event on 18 December?

YES/<u>NO</u>

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Does the application of species rich cover crop mixtures in organic horticulture (esp. viticulture) ensure (i) good soil fertility, structure, microbial activity; (ii) good weed suppression; (iii) enhanced control of diseases and pests through creating habitats for beneficial organisms; while (iv) sustaining optimal growth of plants, desired yield quantity and quality?

### What are the strengths of your research institute? (max. 5 lines)

ÖMKi is a private research institute specialized on the advancement of organic agriculture in Hungary. ÖMKi is a partner of the Swiss Research Institute of Organic Agriculture, FiBL. Since 2013 ÖMKi is also an External Department of the University of Debrecen, Institute of Biology and Ecology. ÖMKi is recognized for its direct connection to organic farmers, practice oriented research, strong specialist staff, and good networking. We are dedicated to conducting cutting edge organic research.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

ÖMKi conducts <u>species rich cover crop mixture experiments</u> in more than 20 organic vineyards of Hungary since 2012. Since 2012 we pursue <u>organic potato variety trials</u> with more than 25 organic producers throughout the country.

ÖMKi is a partner in the <u>Healthy Minor Cereals FP7</u> project Since 2013 we participate in a Leonardo da Vinci partnership project targeting on-farm education. The University of Debrecen, Institute of Biology and Ecology conducts the following projects: <u>EuMon project</u> for monitoring biodiversity <u>SCALES project</u> for integrating our knowledge on the factors effecting biodiversity on different scales <u>BioFresh project</u> on the integration of freshwater biodiversity data <u>Egyek-Pusztakócsi LIFE-Nature project</u> for natural grassland restoration

### What kind of partners are you looking for (as regards field of competence, country....)?

Partners who we may join in order to build a strong international consortium for the investigation of the above detailed cover crop research questions.

Hungary is not an official member of CORE Organic Plus, however, through non-governmental funding we wish to participate in the programme.

### Please provide your contact details:

First and last name: Dr. Dóra Drexler Research Institute: Hungarian Research Institute of Organic Agriculture, ÖMKi Email: dora.drexler@biokutatas.hu Phone number: +36203469120





### Applicant information sheet – for partnering search

### Will you attend the Brokerage Event on 18 December?

NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and	
pests	
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	$\checkmark$

### Which research questions do you specifically want to address in your project?

The research for organic farming should be focused on developing technologies which may attract the farmers / growers to adopt them, keeping in view of the requirements of small holdings of resource poor small and marginal farmers.

There is a large gap in understanding the exact mechanism played by the soil microbes in the organic soil.

Hence, I would like to study the impact of soil microbial diversity and how it impart better quality in the organic produce.

### What are the strengths of your research institute? (max. 5 lines)

Our university is oldest Agricultural university in India (www.tnau.ac.in) serving more than 100 years for the farming community.

My department (Agricultural Microbiology) has strong research area in the field of biofertilizers development and application.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

S.No.	Name of the project	Funding agency	Total budget	Duration
i.	Biotization - A novel bioinoculant delivery strategy for banana micropropagation	Department of Science & Technology, new Delhi	22.50 lakhs	2012-2015
ii.	Bacteriophages - A novel	Ministry of Food	67.96 lakhs	2012-2014

### The following research projects are in progress in my lab

	biopreservative for vegetables	Processing Industries , New Delhi		
iii.	Lytic Bacteriophages as a Biorational Biocontrol Agent Against the Bacterial Wilt Disease of Brinjal	Department of Biotechnology, New Delhi	29.68 lakhs	2012-2015
iv.	Ecotoxicological Assessment of Engineered Metaloxide Nanoparticles on PGPR Microorganisms - <i>Pseudomonas sp.</i>	Department of Biotechnology, New Delhi	31.09 lakhs	2012-2015

# What kind of partners are you looking for (as regards field of competence, country....)?

I am interested to work with partners specialized in nutrient dynamics in organic crop production, promoting organic crop production under problem soils, changing climate, biotic and abiotic factors (moisture stress).

### Interested to work with peoples of any country.

### More specific

To encourage biological cycles within farming systems by involving the use of soil microorganisms,

To maintain and increase the long term fertility of soil and biodiversity

To use renewable resources in locally organized production systems

To work with a close system with regard to organic matter and nutrient elements

### Please provide your contact details:

First and last name : Senthilkumar Murugaiyan Research Institute : Department of Agricultural Microbiology TamilNadu Agricultural University Coimbatore – 641 003 TamilNadu, India Email: senthilkumarmicro@yahoo.co.in Phone number: 91-9626894973





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	Х
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	X

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Our approach to research is related to the direct involvement of farmers in the whole innovation process. A participatory approach to research is the base of our involvement in research project and often we have been responsible for stakeholder involvement in research projects. In particular for this call we consider useful to address the following research questions:

- 1. How to fertilize with few biomass? (green manures, some biodynamic preparations, closing the N and C cycle at territory level)
- 2. How to improve mulching, cover crops, natural vegetation and green manures?
- 3. What can be the role of flower beds to attract indigenous beneficial to manage pest balance in fruit and vegetables?
- 4. What is the impact of no tillage and minimum tillage in organic farming compared to the conventional tillage techniques.
- **5.** How to build Mediterranean agroforestry systems? (eg. Crop and vegetables under fruit trees)

### What are the strengths of your research institute? (max. 5 lines)

The main strength of our institute is to be an organic farmers' association with long term experience in research and on farm experimentation. The Italian Association for Organic Farming (AIAB) was officially established in 1988; it gathers about 15.000 members (farmers, processors, experts, researchers and consumers). It is organized by regional chapters (17) coordinated by a federal Office located in Rome. AIAB promote organic farming as a model of rural development. During the 90s AIAB increased its collaboration with governmental agencies and research institutions. We have today a long term experience in research project management and development. AIAB has been involved in many national and E.U. projects on research (FP6 and FP7), training, promotion and information in the organic farming sector. AIAB staff participates to Ministerial committees on organic farming and to IFOAM regional groups and committees where they have the task to represent Italian organic farmers and consumers. AIAB publishes a bi-monthly magazine (Bioagricultura, 16.000 subscribers) concerning vulgarization and innovation transfer activity, a weekly newsletter (B@N, 8.000 subscribers), several technical leaflets and books and has an updated web-site (www.aiab.it, 4.000 single visits per day); it organizes field days, workshops and seminars. In 2007 AIAB founded the FIRAB (Italian Foundation for the Research in Organic Farming).

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

### Main project in 2013 at EU level:

SOLIBAM – "Strategies for Organic and Low-input Integrated Breeding and Management". (funded by EU FP7, coordinated by INRA-France), - STABIWINE – Use of biopolymers for sustainable stabilization of quality wines (funded by EU FP7, coordinated by AIAB) - SUPURBFOOD - Towards sustainable modes of urban and peri-urban food provisioning (funded by FP7, coordinated by Wageningen Universiteit-The Netherlands). - INTERVEG – Enhancing multifunctional benefits of cover crops – vegetables intercropping (funded by ERA-Net Core Organic2). - AUTHENTIC FOOD -Fast methods for authentication of organic plant based foods (funded by ERA-Net Core Organic2). -COBRA – Coordinating Organic Plant Breeding activities for diversity (funded by ERA-Net, Core Organic2

### What kind of partners are you looking for (as regards field of competence, country....)?

Other farmers associations interested in participatory approach to research and Research institute interested in on-farm experiments to develop.

### Please provide your contact details:

First and last name: Andrea Ferrante Research Institute: AIAB - Italian Association for Organic Agriculture Email: a.ferrante@aiab.it Phone number: +39 0645437485





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	Х
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

1) Effects of soil fertilization and water content on plant's induced indirect defences (attraction of natural enemies) against insect pests.

2) Effects of below-ground insects and other organisms on plant resistance to above-ground pests.

3) Effects of crop diversity on pest populations and natural control.

4) Effects of natural green covers on pest populations and natural control.

### What are the strengths of your research institute? (max. 5 lines)

Our group has been working for more than 20 years on several basic and applied aspects of biological control; the results we obtained are published on referred ISI journals. Our expertise is therefore appropriate for the first two thematics.

The Department facilities include well-equipped laboratories and experimental fields.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

Some relevant current projects: 1. Plants' below- and above-ground interactions for defences against biotic and abiotic stress. Our group is focusing on indirect defences against herbivorous insects. 2. Biological control of the chestnut gall midge, *Dryocosmus kuriphilus*, by inoculative releases of the introduced parasitoid *Torymus sinensis*. 3. Behavioural ecology and predation efficacy of ladybeetles (Coleoptera: Coccinellidae) on aphids in melon fields. 4. Evaluation aphid parasitoid efficacy in melon fields.

Past projects include basic and applied research on tri-trophic interactions (plant-herbivoreparasitoid) for: 1. biological control of insect pests; 2. plant's direct and indirect induced defences against insect pests; 3. improvement of parasitoid efficacy through semiochemicals; 4. parasitoid specificity and non-target risks; 5. side effects of insecticides on parasitoids. What kind of partners are you looking for (as regards field of competence, country....)?

Please provide your contact details: First and last name: Eric Conti Research Institute: Dipartimento di Scienze Agrarie e Ambientali, Università degli Studi di Perugia, Italy. Email: eric.conti@unipg.it Phone number: +(39) 328 8345106





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	Х
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

The research aim is to develop "enhanced" organic system (based on intensive use of intercropping, dedicated cover crop strategies and conservative tillage) with high ecological intensification, in order to obtain a further improvement of self-sufficiency and resource use efficiency, as compared to "traditional" organic farming systems (with special focus on N dynamics and loss and soil carbon storage capacity of the soil.

### What are the strengths of your research institute? (max. 5 lines)

The main research topics may be framed within the following: 1) evaluation and optimisation of organic and low-input cropping systems; 2) optimisation of sustainability of conventional cropping systems; 3) rational weed control; 4) new crops and varieties. In all the cases, a particular emphasis is given to long-term experiments, as advantages and drawbacks of cropping systems very often show up after several years.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

### Ongoing projects:

Integration and comparison of innovative technical approaches with different "ecological intensification" finalized to a smart management of conservative agricultural systems (MIUR).
 IC-FAR: Linking Long Term Observatories with Crop Systems Modeling For a better understanding of Climate Change Impact, and Adaptation StRategies for Italian Cropping Systems (MIUR)

### Projects carried out in the past:

- Effects of fertilisation and mechanical, physical and chemical weed control on weed flora in conventional and low-input maize" (MIUR / University of Perugia).

- SIMBIOVEG: Organic farming systems for the improvement of vegetables quality and environmental safety (MiPAAF)

- Organic farming to improve yield quality and environmental sustainability of farming systems (MIUR)

### What kind of partners are you looking for (as regards field of competence, country....)?

No preferences about country

Fields of competence:
Organic farming and vegetable production
Ecology of intercropping
Soil organic matter and soil microbiology
CO2 source and sink relations in the soil
N cycle and N loss in vegetable and arable farming systems

Please provide your contact details:

First and last name: Giacomo Tosti Research Institute: Department of Agricultural and Environmental Sciences Email: giacomo.tosti@gmail.com Phone number: +393403743300





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Sustainable use of agricultural practices for soilborne fungi and nematodes containment by the application of biofumigation technique based on specific green manure, pellets and liquids of Brassicas admitted in organic farming), with the evaluation of the impacts on soil microbioma, soilborne fungi and nematodes by DGGE analysis and omic techniques, NGS of genetic and functional soil microbial diversity and functional microarrays and the use of available genomic sequences of selected pathogen(s).

### What are the strengths of your research institute? (max. 5 lines)

CRA is the biggest Italian 100% public research organization in agriculture including 25 Centre of Research. CRA-PAV (Centre for Pathology) has acquired deep knowledge in the field of taxonomy, biology, diagnosis and epidemiology of several fungal pathogens (soilborne, airborne, seedborne). CRA- CIN (Centre for Industrial Crops) is involved in the study of biologically active compounds in plants and derived materials with biofumigant properties. CRA ABP (Centre for Agrobiology and Pedology) has got a considerable expertise in the study of the influence of different agronomic management on soil and rhizospheric microorganisms as well as nematodes.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

CRA-CIN: Italian project VALSO Valorization of biodiesel co-products; Italian Project BIOGEA New production systems in organic farming at high sustainability: sugarbeet and tomatoes; Regional Project Utilization of biocidal green manure for the control of soilborne pathogens on horticultural crops. CRA-PAV Project BIOMED Biocontrol Agents for the control of *Pyrenochaeta lycopersici*, agent

of corky root of tomato; Project RESPAT Identification of genes involved in resistance and virulence in the plant-pathogen interactions of agricultural species. CRA-ABP: Italian Project VIGNA-CRU Characterization and monitoring of corporate vineyards by mean of sensors and innovative techniques; Italian Project ENDBIOFRUIT Improving soil endogenous functionality in biologically managed apple orchards: cereals as cover crops to increase microbial populations involved in soil suppressiveness against radical pathogens responsible of decrease in productivity; NEMVIR Evaluation of the presence on parasitic nematodes as virus carrier in plant rhizosphere.

### What kind of partners are you looking for (as regards field of competence, country....)

The above reported competences are available both for a scientific approach to the study of natural bioactive molecules as the biofumigant materials and for the evaluation of their effects both on some pathogens and on soil microbioma. This approach can be applied even from organic growers suffering for yield and quality reduction caused by soilborne diseases in intensive and greenhouse organic horticulture and greenhouse agriculture, and those who are interested in a virtuous soil fertility management by the incorporation of significant amounts of organic matter. These approaches, particularly the green manure one, can be applied also in third countries agricultural systems with lower economic resources.

Please provide your contact details:

First and last name: Luca Lazzeri Research Institute: Centre of Research for Industrial Crops Email: luca.lazzeri@cracin.it Phone number: +39 0516316898





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

- Influence of different environments on adapted vs not adapted materials performances.
- Influence of crop genetic diversity level (heterogeneous vs homogeneous materials) on yield, yield stability, tolerance to biotic and abiotic stresses, product quality under different organic conditions and on beneficial soil microorganisms.

### What are the strengths of your research institute? (max. 5 lines)

The Dipartimento di Biologia Applicata (DBA) has experience in research on Plant Breeding, Genetics, Botany and Microbiology. The DBA is active in studies aiming to identify genes involved in adaptation and in the control of agronomically-relevant traits. The DBA studies biodiversity conservation strategies in agro-ecosystems, diversity evolution of both wild and cultivated plants (especially landraces), and also runs a seed bank counting over 5000 accessions.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

i) 2010-2014 'Strategies for Organic and Low-input Integrated Breeding And Management (SOLIBAM)' EC FP7-KBBE-2009-3 GA n. 245058. Budget 518488 euro. (Coordinator Dr. Veronique Chable, INRA, Rennes, FR).

ii) 2011-2014 'Novel characterization of crop wild relative and landrace resources as a basis for improved crop breeding' (PGR-SECURE) EC FP7 KBBE.2010.1.1-03, call KBBE-2010-4 GA n. 266394. Leader del WP4\_Landrace conservation. Budget 262716.00 euro. (Coordinator Prof. N. Maxted, University of Birmingham, UK).

ii) 2007-2011 'An integrated European in situ management workplan: implementing genetic reserves and on farm concepts (AEGRO)', EC project 057 AGRI GEN RES 870/2004 contract n. AGRI-2006-

0396, Leader del WP3\_ Case study landraces. Budget 101020 euro. (Coordinator Dr. Lothar Frese, Federal Center for Breeding Research on Cultivated Plants, Quedlinburg, DE)

# What kind of partners are you looking for (as regards field of competence, country....)? Fields of competence:

- Organic farming;
- Ecology of mixtures and heterogeneous populations;
- Yield, yield stability analysis and GxE analysis;
- Soil microbiology community analysis;
- Biotic and abiotic stress analysis.

### Please provide your contact details:

First and last name: Research Institute:	Dr. Lorenzo Raggi (will take part to the open day) Dipartimento di Biologia Applicata (DBA), Università degli Studi di Perugia, Italy
Email:	lorenzo.raggi@gmail.com
Phone number:	0039/0755856212
First and last name:	Prof. Valeria Negri
Research Institute:	5
Research Institute:	Dipartimento di Biologia Applicata (DBA), Università degli Studi di Perugia, Italy
Email:	valeria.negri@unipg.it
Phone number:	0039/0755856218





### **Applicant information sheet – for partnering search**

### Will you attend the Brokerage Event on 18 December?

NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Investigating agronomic characteristics and management methods of legume species when they are used as cover crops in organic farms of Central Italy producing olive oil/apples and vegetables. The use of single species or mixtures will be investigated. Locally adapted varieties of *Vicia*, *Medicago*, *Lotus* and *Lathyrus* will be tested. Further partnerships can be activated with the University of Perugia to study the effects of pests and diseases within the experimental fields.

### What are the strengths of your research institute? (max. 5 lines)

The Institute of Biosciences and Bioresources (IBBR), Research Division of Perugia, CNR, has a longterm experience on plant molecular biology applied to species like olive (*Olea europaea* L.) and forage species, both leguminous and gramineous ones. In particular, we worked with annual legumes used as cover crops. Our research staff (researchers and technicians) is formed by 20 people.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

We were involved in two EU projects with research topics related to genetic improvement of annual and perennial legumes ("CAGED", FAIRE CT98-4068, 1999-2001 and "GLIP", Grain Legumes Integrated Project, Food-CT-2004-506223). Nowadays, we are carrying out regional and national research agriculture projects, for example "Olive genetic breeding and genomics (OLEA), funded by MiPAAF, and the "CISIA" project, funded by CNR, which aims to improve the valorisation and sustainability of Southern Italy agroofood products.

### What kind of partners are you looking for (as regards field of competence, country....)?

We are looking for a network of European partners interested in the same thematic area of our project.

### Please provide your contact details:

First and last name: Michele Bellucci

**Research Institute:** Institute of Biosciences and Bioresources (IBBR), Research Division of Perugia, CNR

Email: michele.bellucci@ibbr.cnr.it

**Phone number:** +39-075-5014864





### Applicant information sheet

### Will you attend the Brokerage Event on 18 December? YES

YES/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	YES
Functional biodiversity to improve management of diseases, weeds and pests	YES
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Abiotic stresses to plants in soil. Role of soil organisms. Nutrient management using sapropel.

### What are the strengths of your research institute? (max. 5 lines)

- 1. 100 years long experience in agri\_science (field crop management, plant breeding).
- 2. Experience in international projects.
- 3. Qualified personnel.

Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

### **FP7- EUROLEGUME**

FP7-COBRA INTERREG III- BALTORGPOTATO INTERREGIIIC- CleanRegion FP6- CHANNEL Leonardo-da Vinci- ECOLOGICA East East: Partnership Beyond Borders Program COST 860 SUSVAR

What kind of partners are you looking for (as regards field of competence, country....)? Specialists in nutrient management.

Please provide your contact details:

First and last name: Livija Zarina Research Institute: State Priekuli Plant Breeding Institute Email: Izar@inbox.lv Phone number:+ 371 28377052





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

How to design an effective and manageable biodiverse invertebrate community in and around greenhouses for a resilient control pest insects and mites

### What are the strengths of your research institute? (max. 5 lines)

Already since 1962 our institute is working on biological control of insects and mites in greenhouses. We are part of the Biogreenhouse COST project

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

We are working on all pests relevant for greenhouse vegetable production (see our website : wageningenurgreenhousehorticulture.nl or biogreenhouse.org)

### What kind of partners are you looking for (as regards field of competence, country....)?

The NL did not made budget reservation for this subject but we want to cooperate and to link this subject to the activities in working group 3 of COST Action Biogreenhouse.

Please provide your contact details:

First and last name: Rob Meijer and Gerben Messelink Research Institute: Wageningen UR Greenhouse Horticulture Email:rob.meijer @wur.nl and Gerben.messelink@wur.nl Phone number: +31317485632 (Rob) +31317485649 (Gerben)





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

- enhancing the grapes productivity and quality with taking account of sustainability of the vineyard;
- increase the microbial biodiversity in the vineyards soil
- minimize the environmental impact of agriculture in the grape-growing areas.
- improve control of key plant diseases (downy mildews, mildew, grey mould) and pests (grape moth).
- maintenance of diversity in vineyard

### What are the strengths of your research institute? (max. 5 lines)

We have over five years experience in organic cultivation of 45 hectares of vines, planted with autochthon varieties Column and Fetească neagră and international varieties Chardonnay, Cabernet Sauvignon and Pinot noir. We have own climatic database, soil analysis, data on the biology of varieties and evolution of disease and pests.

Perform physical-chemical analyses of wines from S-E area of Romania

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

1. AGRAL Program / Integrated management of wine production in dry areas - getting vine products of high quality with minimal environmental impact.

2. AGRAL Program / Assessment of environmental quality wine in the context of EU accession.

3. PNII program / Optimize the use of water resources in arid areas vineyards.

4. ADER 2020 - MADR/1.1.6. New grapevine technologies for reduction the climatic change effects.

5. ADER 2020 - MADR/1.1.14. Development of a set of methods and techniques of growing vines organically, focusing on utilizing primary and secondary products resulting from vineyards in order to reduce energy consumption.

### What kind of partners are you looking for (as regards field of competence, country....)?

Universities, institutes of researches in horticulture - viticulture, with experience in European Projects. High sensitive laboratory in soil and biological samples. Suppliers of new biocontrol products who want to test these products.

### Please provide your contact details:

First and last name: Aurora RANCA Research Institute: Reseach Station for Viticulture and Oenology Murfatlar, Romania Email: auroraranca@yahoo.com Phone number: 0040740809024





### **Applicant information sheet – for partnering search**

### Will you attend the Brokerage Event on 18 December?

YES/NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### For which thematic research area do you want to apply?

Functional biodiversity to improve management of diseases, weeds and pests.

### Which research questions do you specifically want to address in your project:

Exploring functional biodiversity of organic field crops to improve management of diseases, weeds and pests;

Monitoring of companion diseases, weeds and pests of organic field crops;

Multifunctional control methods of diseases, weeds and pests in organic farming systems – certainlies and limits;

Working with functional biodiversity in practice to control diseases, weeds and pests in organic field crops.

Improving of functional biodiversity by new crops varieties and management practices;

### What are the strengths of your research institute:

- Breading of cereals, legumes, industrial and forage crops and herbs;

- Agro-ecological management practices of cereals, legumes, industrial and forage crops and herbs;
- Indentification of the cereal, legume, industrial, forage and herb varieties for organic agriculture;
- Research and innovation in organic seed multiplications;
- Estimation of agro-forestry windbreak characteristics and benefits

### Which relevant research projects is your institute running now?

- Integrated genotypic, phenotypic, qualitative and technological studies about organic seeds multiplication of cereals, legumes, forage and industrial crops and herbs.
- "Legume Futures" Legume supported cropping systems for Europe.

### What other research projects has your institute carried out in the past?

- Development of the technological prototype for cultivation of cereals, annual and perennial legumes, industrial crops and vegetables in organic farming system;
- Ecological Cross-Border Opertations for a Business Integrated Zone ECO BIZ;
- Identification and cultivation of baking winter wheat cultivars for organic farming;
- Conservation of mountain agro-ecosystems biodiversity;
- Qualitative interactions because of transformation of nutritive substance on the food chain "forage animal human"n for establishiong the human health impact.

### What kind of partners are you looking for (as regards field of competence, country ....)?

Internationally leading Research and Innovation Centres, Institutes and University in Organic Field Crops.

Please provide your contact details:

First and the last name: Ion TONCEA

Email: toncea@ricic.ro; fundulea@ricic.ro

Phone number: 00 40 213 311 07 22; Mobile: 00 40 724 38 43 01





### Applicant information sheet – for partnering search

### Will you attend the Brokerage Event on 18 December?

No

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Does intercropping faba bean and cereals improve the uptake of mineral nutrients in the crops? What root exudates are released in the rhizoshere of intercropping systems that may improve the availability of mineral nutrients to the plants?

Can severity of root diseases and chocolate spots (*Botrytis fabae*) in faba bean be reduced by an improved uptake of mineral nutrients in intercropping systems?

### What are the strengths of your research institute? (max. 5 lines)

We have an excellent field trial unit that can perform the field experiments in relevant fields. We have close connection to advisors and farmers. We have high expertise in uptake of plant mineral nutrition and plant pathogens.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

Intercropping maize with faba beans improves protein content in silage and reduces weed problems in organic farming. We found that intercropping increased element uptake in both crops. There was a significant negative correlation between copper concentration in the shoots and the disease severity index of leaf spots in faba bean.

Effects of micro nutrients on root rot in red clover. We found a reduction in root rot severity when Mn and Zn were applied.

The effect of intercropping faba bean or pea with oats on protein yield, presence of weeds and diseases in faba bean.

The effect of boron in seed production of organic red clover and white clover.

### What kind of partners are you looking for (as regards field of competence, country....)?

Partners interested in the development of sustainable cropping systems such as intercropping. Partners interested in working with farmers and intercropping systems that may be applied by farmers. Field of competence we are looking for; effects of intercropping various crops, element uptake, plant pathogens and organic systems.

### Please provide your contact details:

First and last name: Eva Stoltz Research Institute: The Rural Economy and Agricultural Society/HS Konsult AB Email: eva.stoltz@hushallningssallskapet.se Phone number: +46 19 603 27 21





## Applicant information sheet – for partnering search

Will you attend the Brokerage Event on 18 December?

YES

### For which thematic research area do you want to apply?

, ,,,	
Plant/soil interaction in organic crop production	Coordination by
	the Centre EPOK
	- all themes of
	interest
Functional biodiversity to improve management of diseases, weeds and pests	u
Livestock health management systems, including breeding	u
Ensuring quality and safety of organic food along the processing chain	u

### Which research questions do you specifically want to address in your project? (max. 5 lines)

I represent EPOK – Centre for Organic Food and Farming at the Swedish University of Agricultural Sciences (SLU), working with organic research coordination. As director of EPOK I have an overview of researchers/research groups working within the this field in Sweden, as well as main research areas for activities within organic food systems.

### What are the strengths of your research institute? (max. 5 lines)

EPOK has extensive networks among agricultural scientists and stakeholders within the agricultural sector. The staff of EPOK has communication skills and capacities.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

As part of research coordination and communication a number of projects are running on making knowledge synthesis together with research needs within different areas, examples; Conservation biological control in field vegetables and fruits; Organic food quality and health effects; Potential of recycling of nutrients in organic farming systems by using biogas digest.

### What kind of partners are you looking for (as regards field of competence, country....)?

I am looking for partners of interest for Swedish research groups/partners interested of collaboration with Swedish researchers.

### Please provide your contact details:

First and last name: Maria Wivstad Research Institute: Swedish University of Agricultural Sciences, EPOK Email: Maria.Wivstad@slu.se Phone number: +46 70 677 14 09





### **Applicant information sheet – for partnering search**

### Will you attend the Brokerage Event on 18 December?

NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	х
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Precision technology to improve nutrient utilization and reduce weed pressure in crop production Nutrient supply in the organic system, as influenced by preceding crops/crop rotation and added fertilizers

Treatments of manure and organic fertilizers to improve nutrient utilization in crop production Participatory research on farms, to solve specific problems on the farms

Find and test more municipal sources of nitrogen to be recycled to organic production

### What are the strengths of your research institute? (max. 5 lines)

We have a high expertise on plant nutrient management and precision agriculture. We are situated in an important agricultural area and have close collaboration with other agricultural organizations. We work side by side with a livestock department. Apart from regular field trials, we also have the knowledge and equipment for conducting incubation experiments, NIR measurements, geostatistical analyses, GIS, nutrient leaching, gas emissions, participatory learning and action etc.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

Methods for estimation of nitrogen and phosphorus effects of organic residues Course of nitrogen mineralization from organic fertilizers Timing of fertilization and optimum N-rate with different organic fertilizers to oilseed rape Timing of fertilization of chicken manure to spring cereals Nitrogen leaching depending on time for manure application to different crops Nitrogen leaching depending on time for manure application and sowing date of winter oilseed rape Can C/N-ratio be used for estimation of N fertilizer value of residues in spring and winter cereals? Nitrogen effects with and without incorporation of different organic fertilizers or manure in growing winter wheat

Temporal course of net N mineralization and immobilization following incorporation of crop residues

### What kind of partners are you looking for (as regards field of competence, country....)?

Institutes interested in the development of sustainable and efficient plant nutrient management, where recycled nutrient resources are utilized in an efficient way to produce high quality products with minimized nutrient losses to the environment. Institutes interested in the implementation of precision agriculture methods to enhance this. Institutes that are interested in involving farmers in the research and that are not afraid of using modern technology.

#### Please provide your contact details:

First and last name: Sofia Delin Research Institute: Swedish University of Agricultural Sciences (SLU), Dep. of Soil and Environment, Division of precision agriculture and pedometrics Email: sofia.delin@slu.se Phone number: +46 511 67235





### Applicant information sheet – for partnering search

### Will you attend the Brokerage Event on 18 December?

NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	х
Functional biodiversity to improve management of diseases, weeds and pests	х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Macro and micro nutrient supply in the organic system Crop rotation including weed and pest management Forage production and seed mixture to optimize yield and nutrient quality Use of crops for energy production

### What are the strengths of your research institute? (max. 5 lines)

We are a well-established with a large advisory service within the areas of cereal and forage production, economy, building construction, energy use efficiency and environmental concern in farming. The large number of farmers using our services gives us a strong connection to the complex challenges in practical farming and a short way to the implementation of new scientific knowledge. We also have a high academic level of the staff and good facilities for agricultural field experiments.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

Now running: Cupper deficiency and molybdenum toxicity in forage,

Improved establishment of Lucerne,

Integrated control of slugs in winter oilseed rape,

Quantitative real-time PCR in comparison with visual grading for fungal infection in wheat,

Development of organic and integrated cropping systems for the future

Nitrogen leaching from an organic cropping system (measurement of leaching from individual fields by automatic flow measurements and water sampling)

A large number of field experiments on applied cropping methods as fertilisation and other measures.

### What kind of partners are you looking for (as regards field of competence, country....)?

Institutes interested in the development of agricultural cropping systems for the future in regards of efficient use of fertilisers, energy and other measures, by applying research questions in significant areas where there is a lack of knowledge and areas where todays knowledge need to be implemented further.

Please provide your contact details:

First and last name: Ulf Axelson Research Institute: Rural Economy and Agricultural Society of Skaraborg (REAS) Email: ulf.axelson@hushallningssallskapet.se Phone number: +46 511 24837, +46 708 617399





### Applicant information sheet – for partnering search

### Will you attend the Brokerage Event on 18 December?

YES/<del>NO</del>

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

The project will investigate the potential of mixed variety cultivation for enhanced resilience against biotic and abiotic stress in European cereals. The effects of variety mixing in wheat and barley will be evaluated with regard to- yield productivity and stability, adaptability to environment and climate and suppression of key insect pests (aphids) and pathogens (plant viruses, fungal diseases). Mechanisms underlying the interaction of plants in functionally diverse stands will be investigated with focus on plant neighbour detection and adaptive physiological responses.

### What are the strengths of your research institute? (max. 5 lines)

Swedish University of Agricultural Sciences (SLU) is a leading institution in the field of agricultural research. SLU has a strong track record in the combination of high ecological research with the application of the findings in an applied context. This is achieved through excellent contacts with end-users, policy makers and other stakeholders. The institution's strong profile facilitates participatory research with end users. Excellent facilities exist for carrying out laboratory and semi-field experiments.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

APPEAL - Assessment and valuation of pest suppression potential through biological control in European agricultural landscapes

AGRIPOPES - Agricultural policy-induced landscape changes: effects on biodiversity and ecosystem services

RATING-SRC - Reducing environmental impacts of SRC through evidence-based integrated decision support tools

ICON - Industrial crop producing added value oils for novel chemicals

BALTIC LANDSCAPE - Baltic Landscape in change - innovative approaches towards sustainable forested landscapes

NORTHCHARR - Sustainable Aquaculture of Arctic charr.

### What kind of partners are you looking for (as regards field of competence, country....)?

- Plant behaviour- neighbour interactions, competitive interactions.
- Plant signalling and communication- neighbour detection via chemical exchange and light signalling etc.
- Plant pathology
- Plant genetic diversity and ecosystem function- influence of within-species plant diversity for higher trophic levels

Poland Switzerland France Romania Turkey

Please provide your contact details:

First and last name:Velemir NinkovicResearch Institute:Swedish University of Agricultural Sciences, Uppsala, SwedenEmail:velemir.ninkovic@slu.sePhone number:+4618672541





### **Applicant information sheet – for partnering search**

### Will you attend the Brokerage Event on 18 December?

NO

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	YES
Functional biodiversity to improve management of diseases, weeds and pests	YES
Livestock health management systems, including breeding	NO
Ensuring quality and safety of organic food along the processing chain	NO

### Which research questions do you specifically want to address in your project? (max. 5 lines)

The studies will be conducted to improve the IPM methods for reducing the losses originated from pests, diseases and weeds in fruit species and open and greenhouse vegetables. The studies directed to develop the effectivity of solarization in greenhouses, cultural practises and biological control studies have top priority.

### What are the strengths of your research institute? (max. 5 lines)

The research will be carried out with the coordination between the Research Stations (Biologic Control Research Station and Land and Water Research Station, both are under the Ministry of Agric., TAGEM University) and Cukurova University. The related department of the university has research experience on the subject under field and greenhouse conditions. Also, all the field, lab and growth chamber facilities and the related equipments are available to carry out such a research.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

- Introduction of alternatives to methyl bromide in protected strawberry, pepper and eggplant in East Mediterranean region and in strawberry in Aydin province of Turkey 2000-2003 (World Bank)
- 2. Phasing Out Methyl Bromide In Turkey, 2003-2007 (UNIDO)
- 3. Training And Monitoring Project For Methyl Bromide Phase-Out 2004-2007 (World Bank)

- 4. Soil Disinfestation Microwave System As An Alternative To Methyl Bromide MICRODIS Contract N<sup>0</sup>:COOP-CT-2003-508465 2005- 2006 (EU FP 6)
- 5. IPM on strawberry 2011-2014 (TÜBİTAK110 R 009 )
- 6. Developing suitable technologies for *Trichoderma* spp. formulations against important soil borne pathogens. Improving propagation methods for examining in organic plant production.2013-2016 (TÜBİTAK 1007-111G055)
- 7. Investigations on applicability of Mass-Trapping Method Against *Thrips* Species (Thysanoptera: Thripidae) in Nectarine Orchards
- 8. Supporting Fruit Fly Detection and management for Balkans and Eastern Mediterranean (RER5018RTC2-International atomic energy agency (IAEA).

### What kind of partners are you looking for (as regards field of competence, country....)?

- 1. Any country is OK, especially the Mediterranean countries; since the climate, soil and crop varieties are similar.
- 2. Universities, research stations and SMEs, growers and local farmers could be the partners.
- 3. Soil Sci., Plant Nutr., Fertilization, Irrigation Sci., Plant Protection areas could be preferable.

### Please provide your contact details:

First and last name: Prof.Dr. Hayriye IBRIKCI Research Institute: Cukurova University Email: hibrikci@cu.edu.tr Phone number: +90 322 338 6643 / 2216

First and last name: Asoc.Prof.Dr. Seral YUCEL Research Institute: Ministry of Agric. Biological Control Research Station Email: seralyucel@hotmail.com Phone number: +90 322 344 1784 / 144

First and last name:Dr. Adalet HAZIR Research Institute: Ministry of Agric. Biological Control Research Station Email: adlthz@yahoo.com Phone number: +90 322 344 1784 / 117

First and last name: Alper BAYDAR, M.Sc.Research Institute:Ministry of Agric. Land and Water Resources Div. Tarsus / AlataEmail: www.alata.gov.trPhone number: +90 534 768 13 13





### **Applicant information sheet – for partnering search**

### Will you attend the Brokerage Event on 18 December?

YES/<mark>NO</mark>

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### **Participant Institutes from Turkey:**

**1-**Republic of Turkey Ministry of Food, Agriculture and Livestock General Directorate of Agricultural Research (GDAR)-Directorate of Soil Fertilizer and Water Resources Central Research Institute

**2-** Yeditepe University, Faculty of Engineering and Architecture, Department of Genetics and Bioengineering,(YUDGAB) 34755 Kayisdagi, Istanbul-TURKEY

3- General Directorate of Tea Enterprises (CAYKUR)-TURKEY

Yeditepe University, Faculty of Engineering and Architecture, Department of Genetics and Bioengineering has more than 22 laboratories including Yeditepe University Research ,Development an Analyse Central Laboratory (YU-AGAM).

YU-AGAM is a multiple different laboratory foundation that has approve from Republic of Turkey Ministry of Food. Also it is including Soil,Fertilizer,Plant,Water Analyse Laboratories with advanced fixture.

### Main Researcher: Prof. Dr. Metin Turan

#### His Main Specialization:

- **1** Fertilizer and Fertilization
- 2 Plant Nutrition
- 3 Plant Biochemistry

#### **His Current Research Interests**

1 Soil Phosphorus

### 2 Phytoremediation

**3** Biofertilizer

### Interested thematic research area:

2. Functional biodiversity to improve management of diseases, weeds and pests

#### Idea:

Rhizobacteria and non simbiotic microorganism use to pretend biodiversity and fertilizer inputs to equip the fertilizer inputs for European Union standarts in tea plant with no tillage.

#### **Contact Details:**

### Prof. Dr. Metin Turan

Phone	:	+902164283166
Mobile	:	+905339352756
Fax	:	+902165780529
E-mail	:	m_turan25@hotmail.com
		metin.turan@yeditepe.edu.tr
Work address	:	Yeditepe University, Faculty of Engineering and Architecture, Department of Genetics and Bioengineering, 34755 Kayisdagi, Istanbul-TURKEY





### **Applicant information sheet**

### Will you attend the Brokerage Event on 18 December?

YES/<del>NO</del>

### For which thematic research area do you want to apply?

Plant/soil interaction in organic crop production	Х
Functional biodiversity to improve management of diseases, weeds and pests	Х
Livestock health management systems, including breeding	
Ensuring quality and safety of organic food along the processing chain	

### Which research questions do you specifically want to address in your project? (max. 5 lines)

Plant/soil interaction: We are interested in the effects and different uses of various composts and other organic matter enhancing substances on the health of field and protected crops, particularly in horticultural systems.

Functional biodiversity: Here we are interested in the area of functional biodiversity in different agricultural systems and the interactions and effects on crops.

### What are the strengths of your research institute? (max. 5 lines)

The Centre is the UK's leading independent research, development and advisory institution for organic agriculture. We have research expertise in organic crop production, plant breeding, agroforestry, pest management, biodiversity and horticulture. Our key strength is in the participatory nature of our work, closely working with farmers and growers in our research and involving a wide range of stakeholders at all stages of research from design to analysis.

# Which relevant research projects is your institute running now? What other research projects has your institute carried out in the past? (max. 10 lines)

We are currently involved in two other CORE Organic II projects; we coordinate COBRA (Coordinating Organic Breeding Activities for diversity) and are involved in TILMAN-ORG (Reduced tillage and green manures for sustainable organic cropping systems). We are also involved in seven EU FP7 projects, across a range of topics: Co-Free (Innovative strategies for copper-free low input and organic farming systems), SOLIBAM (Strategies for Organic and Low-input Integrated Breeding and Management), OSCAR (Optimising Subsidiary Crop Applications in Rotations), SOLID (Sustainable Organic and Low Input Dairying), AGFORWARD (Agroforestry that will advance rural development), WHEALBI (Wheat and Barley Legacy for Breeding Improvement), and ODN (European Data Network for Improved Transparency of Organic Markets). We are also involved in the BioGreenhouse COST network (Towards a sustainable and productive EU organic greenhouse horticulture).

### What kind of partners are you looking for (as regards field of competence, country....)?

We are looking for international and national partners that can enhance and add to our research possibilities/skills in the areas described above.

Please provide your contact details:

First and last name: Robbie Girling Research Institute: The Organic Research Centre Email: <u>robbie.g@organicresearchcentre.com</u> Phone number: +44 (0) 1488 658298 x553