Alma Mater Studiorum
Università di Bologna

Sustainable exploitation of bioactive components from the Black sea area traditional foods (BaSeFood)

The BaSeFood project
review of general aspects, and current status

L. Filippo D'Antuono
Campus of Food Science, Cesena
University of Bologna

BaSeFood Consortium members

1. UNIBO, University of Bologna, Italy
2. IFR, Institute of food research, United Kingdom
3. HHF, Hellenic health fundation, Greece
4. INSA, Instituto national da saude, Portugal
5. ONAFT, Odessa academy of food technology, Ukraine
6. UZHNU, Uzhhorod national university, Ukraine
7. MSUFP, Moscow state university of food production,Russian Federation
8. SPES-GEIE, Spread European safety, Italy
9. ASE, Bucharest academy of economics, Romania
10. ELKANA, Biological farming association, Georgia
11. IMR, Institute of medical research, Serbia
12. UFT, University of food technology, Bulgaria
13. YEDITEPE, Yeditepe University, Turkey

UNIBO

Base of the research activities: Cesena Branch, Food Science University Campus

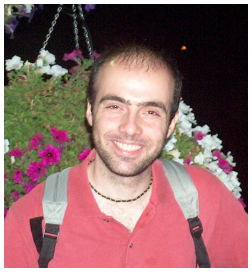
1. Dipartimento di scienze e tecnologie agroambientali (D'Antuono)
2. Dipartimento di scienze degli alimenti (Caboni)
3. Dipartimento di Biochimica (Bordoni)

- Project management: ARIC
- Accounting and administration: Cesena Branch

The food plants research group at the

Food science University campus, Cesena

L. Filippo D'Antuono, professor
Degree in Agricultural science
Food plant production and quality



Federico Ferioli, PhD, post-doc
Degree in Chemistry
Analytical chemistry

Manuela Manco, PhD student
Degree in Agricultural science
Plant science, sensory analysis

Alessandra Bordoni, professor
Degree in Medicine
Human nutrition and biochemistry

Francesca Danesi, PhD, post-doc
Degree in Food Science
Human nutrition

Maria Fiorenza Caboni, professor
Degree in Agricultural science
Analytical chemistry, food technology

Lorenzo Cerretani, PhD, post-doc
Degree in Food Science
Analytical chemistry, sensory science

Federica Pasini, PhD student
Degree in Food Science
Analytical chemistry, food technology

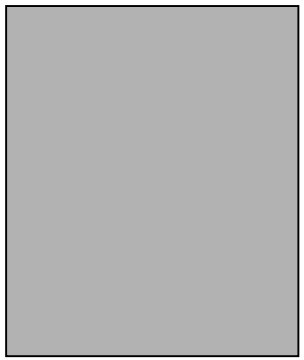
The management and administration group

Verdiana Bandini
Degree in Foreign languages and literatures
Project management coordination, ARIC-UNIBO

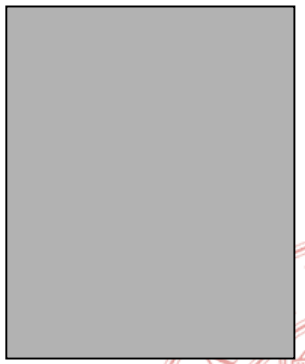
Adriana Dascultu
Degree in Political sciences
BaSeFood Project manager, ARIC-UNIBO

Cinzia Tasso,
Degree in Economic Sciences
Administration and accounting

Mauro Fesani
Administration



Giuseppe Cusimano
Degree in Informatics
Web manager



Mauro Moretti
Degree in Informatics
Web manager

BaSeFood data

- **Nature: Small coordination program**
- **Duration: 36 months**
- **Launched: April 1, 2009**

The call

KBBE-2008-2-2-02: Bioactive compounds in traditional food products - SICA (Black Sea Region) Call: FP7-KBBE-2008-2B

The aim of the topic is to **identify and characterise bioactive compounds in traditional food products** that can be **beneficial for human health** and are **typical for the diet of EU neighbouring regions**. *Scientific data on the risks and benefits linked to these products or compounds will be produced and evaluated. It will include the study of the role and the mechanisms (absorption and activity) of bioactive compounds and also the factors influencing their functional properties (e.g. processing).*

Expected impact: To increase knowledge of nutrients, food components and/or bioactive compounds effects on human health, to provide sound scientific data and to help in **substantiating health and nutritional claims**. **Enhance the cooperation between scientific disciplines and stakeholders (nutrition, practitioners, local food companies, etc.).** This should help the EU food industry to increase its innovation potential and competitiveness, in particular regarding **traditional foods** and SMEs.

BaSeFood, UNIBO and IFR

BaSeFood aims to promote sustainable development and exploitation of traditional foods of plant origin containing emerging bioactive compounds with putative health effects (two initially rather independent concepts !) in the Black Sea Region.

- ✓ **UNIBO set up a Consortium with members from all the coastal Black Sea Countries**
- ✓ **IFR and UNIBO agreed to take EuroFIR, a FP6, IFR-coordinated NoE (coord. Paul Finglas) as a logical, and methodological, reference with respect to:**

- **Traditional foods description and documentation**
- **The use and possible contribution to food bioactive database (EuroFIR BASIS)**
- **Concepts of bioactive yield and retention**
- **Food sampling and standardisation of analytical methods**
- **Food indexing (LanguaL system)**

- **Besides, EuroFIR had interest of extending activities to countries not included in the original Consortium**

- **Four EuroFIR partners are also BaSeFood members: IFR, HHF, INSA, IMR**

BaSeFood challenges

A. Create opportunities. These will be attained through RTD activities, generating a base of knowledge from which SMEs and other stakeholders can derive transferable information for product development in a European regulatory context. Involvement of SPES-GEIE (coordinator of the TRUEFOOD a FP6 IP, dr. Daniele Rossi), as BaSeFood partner

B. Create trust. Especially towards consumers, in order to enforce the synergy between the health promoting and the traditional food characteristics, in a broad sense sustainability context:

- the need of producing high quality data for health claim substantiation, in order to promote long term sustainable economic development
- the importance of consolidating consumers self awareness, as a basis of long term trust on the traditional food message
- the added value of considering topics related to the preservation of local cultures and crops, and enhance ethic trade as integral parts of food credence quality traits

BaSeFood challenges

- **The final aim is to put bioactive substances and related health claims in a favourable, consumers friendly context, independently of strictly regulatory facts.**
- **The recent results of the health claims submitted to EFSA seem to fully support this integrated approach.**

Involvement of a Board of External advisors (BEA)

Already committed

- **EFSA (European food safety agency)**
- **BIOVERSITY INTERNATIONAL**
- **ORIGIN (Organization for an International Geographical Indications Network)**
- **FAO/INFOODS (The International Network of Food Data Systems)**

Under commitment

- **BSEC (Organisation of the Black Sea Economic Cooperation)**

BaSeFood workpackages, and main forecasted outcomes

WP1. Surveying, recording and describing traditional foods (leader HHF)

- selection of about 30 foods to be entered in the other phases
- description and and documentation the selected foods
- ample documentation of all aspects of a wider range of foods and related plant raw materials

WP2. Bioactive components, nutritional and microbiological characterization of traditional foods (leader: INSA)

- coordination of food sampling and chemical analyses
- proximate and nutrient analysis of the selected foods
- coordination of bioactive analyses of materials considered in WP3 and WP4
- review of harmful and useful micro-organisms in traditional foods

WP3. Health-promoting properties, absorption and bioactivity of target components (leader IFR)

- characterisation of 30 foods / ingredients for in vitro bioactivity
- tests of the bioactivity of prioritised foods in cell model systems
- two human intervention studies in the area of CVD protection potential

WP4. Technological-chain effects on bioactives in traditional foods (leader ONAFT)

- investigations on bioactive retention factors in selected plant ingredients
- revision of flow charts of selected traditional foods
- implementation of technological advances in selected flow charts

WP5. Chain development and consumer issues in health-promoting traditional foods (leader: ASE)

- elaboration of consumers / expert healthy food concepts from traditional foods
- analysis of traditional food perceptions of populations of the Black sea area and Western Europe

WP6. Dissemination (leader: UNIBO)

- to achieve the maximum outcome from project activities and results
- to prepare the way for possible follow ups

WP7. Management (leader: UNIBO)

- to assure proper development of project's activities

traditional foods of plant origin, bioactives

WP1

information

experimental data

regulatory bodies (EU)

BaSeFood

"independent" information

information (scientific data, documentation)

WP2, WP3, WP4, WP6

WP5, WP6

WP6

regulation (health claims, registration)

information

information (documentation)

processors: EU SMEs, local scale; other stakeholders

information (advertising)

consumers

information (labelling)

credence, experience

products

WP1 Traditional food surveying, documenting, sampling

description and selection of foods

survey, documentation, knowledge

WP2, WP3, WP4

WP5

WP6

research outputs: composition,health claims, processing

stakeholders point of view

documentation information

industrial foods from tradition

improvement of t.f. knowledge

enhanced traditional foods (for knowledge, safety...)

co-existence

ex-situ tradition-like foods

in-situ traditional foods

BaSeFood current status

A fundamental milestone

Kick- off meeting held at Yeditepe University, Istanbul, Turkey, June 1-3, 2009

- **work-plan reviewed**
- **participants introduced to the EuroFIR environment (IFR organisation)**

An important deliverable

BaSeFood Web set up and functioning: www.basefood-fp7.eu

Forthcoming events

BaSeFood second Consortium meeting: Plovdiv, Bulgaria, October 28-30, 2009

- **workshop for food prioritisation (30 foods prioritised), start of WP2, WP3, WP4**

A training course about LanguaL food indexing, Belgrade, Serbia, November 9-10 , 2009 (IFR organisation)