“The Sustainable Improvement of European Berry Production, Quality and Nutritional Value in a Changing Environment”
The main objective of the EUBerry project is to provide the necessary knowledge and tools to facilitate development of high quality, consumer-desirable fresh berry fruits of high nutritional quality optimal for human health at a competitive cost. The further objective is the development and validation of a set of tools to improve competitiveness of European berry production and consumer accessibility to berry fruits. The EUBerry platform will be developed and validated by using strawberry, raspberry and blueberry as model crop species. Specific critical points related to improvement of berry fruit quality and reduction of production costs will also be considered for currants and blackberries. This project will apply the most recent technical advances in: a) Identifying germplasm of the main berry fruit Genera appropriate for sustainable production throughout the EU, with respect to fruit quality and environmental adaptation and expanding use of modern breeding strategies to accelerate the release of new berry fruit cultivars into the future; b) Ensuring and expanding high-quality production systems to improve availability of high-quality fresh berries for consumers by focusing on the modern cultivation techniques for berry season extension, on adaptation to different cultivation conditions and systems, as well as to climate change, and on reducing the impact on environment in different European regions; c) Developing and applying validated methods to control and maintain fruit nutritional quality, improving shelf-life of fresh berries and increasing their availability to consumers; d) Developing economic studies to verify the impacts of the new technologies in increasing berry economic viability, farmer and consumer attractiveness; e) Disseminate and communicate the results to research scientists, academia, technical services, growers, market organizations, consumers, food industries, health authorities and regulatory and legislative authorities.
The EUBerry consortium is composed of 14 partners, 11 Universities/Research Centers and 3 SMEs, from 10 Countries (Table 1). The partners (grouped in teams) will be involved in the different aspects of basic and applied research, and all teams will be involved in dissemination activities as well as in data and project management.

The motivation of the involvement of such number of partners is related to the fact that berry cultivation is now increasing in different EU areas and in these different conditions the success of their production (in season and out of season) and quality is closely linked to the use of varieties and cultivation systems fully adapted to the prevailing climatic conditions. For this reason, following a South - to - North and West - to - East approach, we identified Partners located in the main important cultivation areas of these 3 different EU climatic conditions (Figure 1) with proven competence and expertise in the main research fields required for this type of study. In our opinion this partner distribution also gives an important pan-European dimension to the project.

Well defined, standardized and integrated research activities will be developed for the five berries (strawberry, raspberry, blueberry, blackberry and currants) with the aim to achieve the following Project Objectives:

- To enhance varietal performance in terms of quality and quantity production, and extension of production period through breeding.
- To improve cultivation techniques and develop adaptation strategies to changing climatic conditions, as well as minimizing negative impacts on the environment.
- To establish fruit quality, specifically for the fresh market, by including fruit taste, nutraceutical (bioactive), nutritional quality and post-harvest

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<tr>
<th>Partner</th>
<th>Participant organisation name</th>
<th>Short Name</th>
<th>Country</th>
<th>Team Leader</th>
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<tr>
<td>P1</td>
<td>Marche Polytechnic University, Dep. of Environmental and Crop Science</td>
<td>UPM</td>
<td>IT</td>
<td>Bruno Mezzetti</td>
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<td>Derek Steward</td>
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<td>IBET</td>
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<td>Junta de Andalucía Área de Mejora y Biotecnología</td>
<td>IFAPA</td>
<td>SP</td>
<td>José F. Sánchez Sevilla</td>
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<td>FR</td>
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<td>GRC</td>
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<td>Erika Krüger-Steden</td>
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<td>INRB</td>
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<td>Pedro Brás de Oliveira</td>
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stability. For fresh berry fruit the factors determining internal quality and stability now is a key priority, particularly with respect to improving consumer acceptance and health and market value.

- To increase economic competitiveness of berry production and develop a science-based marketing strategy.
- To organize the scientific, technical and public dissemination of project results and conclusions.

**Conclusion**

The outputs from the EUBerry project will directly impact a significant number of key strategic areas including improved sustainable production, enhanced quality of life, important socio-economic factors, the knowledge-based economy, increased competitiveness and prosperity and international developments as well as the advancement of fundamental science and the exploitation of knowledge. The project is therefore entirely consistent with the overall objectives and deliverables of the EC’s 7th Framework Programme on Knowledge Based Bio-Economy (KBBE), to exploit new and emerging research opportunities addressing environmental and economical challenges, the growing demand for safer, healthier and higher quality food and for sustainable use of renewable bio-resources.
The EUBerry kick off meeting started and followed the agenda prepared by the coordinator. At the meetings attended 25 persons. After a short introduction of the project from the Coordinator, a short presentation from Mylona Panagiota, Scientific Officer of the EUBerry project, was followed. After her presentation started a general discussion and the main thoughts were agreed.

1. **WP Leaders Report**

WP leaders introduced the main tasks and deliverables expected for each WP. At the end of their presentation was decided that each WP leader should prepare a short report of their presentation in order to be used for a better planning of the work from each partner. On the webpage will be uploaded all the presentations given by the WP Leaders and Partners.

**WP1 Leader Rex Brennan**

In short were identified the main aspects of the organization of the work for WP1, in particular underlining the importance to identify and quantify the genotypes for each species that all partners will include in their work as well as populations and existing markers to be used. Genes available validation and functional studies on nutritional and flowering have to be identified and used. Deadlines for Deliverables and Milestones have been reported. Links and plan of activities with subcontractors expected by different partners should be defined and properly started with signed contracts.

**WP2 Leader Paivi Parikka**

In short were identified the main aspects of the organization of the work for WP2, in particular underlining the importance of the description of the different deliverables. Almost all Deliverables from WP2 are at 34 months. Activities for all Deliverables have been already started. WP2 has three Tasks and all Subtasks have already started at least in the preparation and set of the different fields and trials.

In Sub-task 2.1.1. Work on strawberry has been started by P6 (level and timing of nitrogen applications) and P2 (regulated water application and different plant types). For raspberry and blackberry, P2-subcontractor has collected the first results and P14 started trials on Blackberry in the south. In Sub-task 2.1.2. P9 has made calculations for tunnel properties (covering properties, ventilation system and cultivation scheme) and the results will be used to choose the best materials for P14 and P13 trials. P8 has started trial with LED lights. Partners P2, P8 and P14 will share knowledge in LED experiments on berries.

In Sub-task 2.2.1 P8 has started trial on raspberry to develop a winter protection system and a low-cost device to control spring frosts is under development by P7-subcontractor. P2 has prepared experimental fields for further testing of the device. Trials on high temperature control on raspberry start in 2012 by P1 and P13. In Sub-task 2.2.2 trials have been started by P10 with primocane-fruiting cultivars and long canes for late production and long canes for early production. Also P8 has started work on the effect of autumn temperatures on raspberry physiology and flower development and observations of flower initiation and development on semi-highbush blueberry in higher temperatures has been started by P7.

In Sub-task 2.3.1 P9 has worked on improved biocontrol and integrated pest management (IPM) on Thrips and the first results are available. P2 has started trials on rationalization of pest management in berry crops in glasshouse production. IPM work on pests by P2, P9 and P14 is coordinated by P9. Biological control of raspberry pests has been started by P7 with work first concentrating on raspberry gall mite (*Phyllocopetes gracilis*), two-spotted spider mite and aphids on two cultivars in tunnel and open field. There will be cooperation of partners in mite control (P2, P14, P7, P11). P8 has worked on the effects of LED lights on the populations of arthropod pests and biocontrol agents. In Sub-task 2.3.2. P9 has worked on developing IPM strategies for disease control and the first results on grey mould (*Botrytis cinerea*) have been obtained. P7 has started work on utilisation of beneficial microorganisms in biocontrol of *Phytophthora cactorum* with greenhouse trials on selected isolates of endophytic bacteria and AMF mycorrhiza. P6 has started work on powdery mildew control with NDS with preliminary tests and P8 has made laboratory tests with...
LED light effects on *Podosphaera aphanis.* In Sub-task 2.3.3, P2 has started work to develop methods to identify strawberry cultivars that utilize water effectively and P1 has results to be presented of the effect of increased temperature and reduced water availability. Of nutrient use, especially nitrogen and phosphorous use in nursery cultivation, trials have been started (P1) and results will be ready in 2012. Raspberry trials on nutrient and water use efficiency will start by P1 and P13 in 2012.

Material for economical calculations for WP4 will be collected: comparison of in vitro planting material and normal material (P2); LED light experiments on strawberry and raspberry (P2, P8, P14); production methods on raspberry (P13), strawberry cultivars (dayneutrals- shortday) in the south (P14); production in tunnels (P10;P13; P14), shading, type of plastic film (P13); low temperature stress on raspberry (P8); biological control on raspberry (P7) and IPM work (P9, P2, P14). Marketing strategies for blackberry are also included in WP4 work.

Partners will further cooperate on N-level on strawberry (P13, P14) and raspberry protocols (P1, P10, P13).

**WP3 Leader Derek Stewart**

In short were identified the main aspects of the organization of the work for WP3, in particular underlining the importance to first deliverable expected at 6 Months: SOP – Standard Operating Protocols. The set of analyses performed by each partner and on which material, has to be identified.

An integration among partners should be considered considering the populations studies and elite material (not only CAT – but at least also TPH, ACY, Vit C) then the profiling study (HPLC o UPLC methods) for a reduced number of selected material and after deliver fruit of the selected material to partners involved in health validation studies. For all these analyses at all these steps well defined sampling, extraction and analytical protocols have to be used. Standard and appropriate criteria for reporting have to be defined.

**WP4 Leader Marianne Groot**

Participants in WP4 already had a first meeting at Wageningen UR, but not with SMEs even if both have been contacted already. Thanks to this meeting some tasks already started. Specific focus will be given to the sensitive analyses in order to better verify what will affect the costs at specific changes (which changes to be considered will be defined). A specific study will be also addressed to the market structure and behavior. About Market strategies – SME can conduct home pilot work and applied results can be studied. The House of quality available at WUR will be used for the program.

**WP5 Leader Pedro Brás de Oliveira**

About WP5 was given only a small introduction considering that special section on this WP was planned for Wednesday morning. In particular it was outlined the importance to define a proper dissemination plan in order to give high visibility to the project – by considering for example links to other webpage at national and international level, promote a dissemination on local language, create links with national event.

Newsletters should have an important role in dissemination particularly for SMEs and growers, possibly by following what planned from different SMEs and other national realities. Create dissemination material for technical magazine – article and news.

**GENERAL DISCUSSION**

At the end of Partner presentations a general discussion was started and following the indications of the Scientific Officer were identified the main new changes of the project to be considered as amendments of the DOV already submitted.

Following is the list of amendments that have been accepted and that will be proposed for the new project DOV:

1) P12 – Fruit Masters will be out from the project.
2) Activities expected from P12 will be reallocated to P11 and 13, both partners have expressed the availability to share the work expected for P12 and after a discussion it was possible to verify the fact that studies expected for P12 can be carried out partially by P11 and P13 without affecting the initial results expected for the project even if located in a different geographical area in comparison with P12. This problem has been discussed mostly for tasks expected for WP4 regarding the production costs and marketing strategies. The conditions of P13 can be considered with high similarity with what was expected for P12, while for the marketing strategies, what expected for P12 can have a similar impact if carried out from P11 because this company has an high impact on the EU market so their studies can be expanded in different EU areas as was expected for P12.
3) P10 proposed to consider JKI, a German institution contacted as potential sub contractor for the WP3 aroma studies, as new partner of the project. This can give to the new laboratory a better capacity of integration in the project with a more direct interaction with the different partners that are involved in such type of studies expected for WP3.

The new project DOV with these amendments will be submitted to the Scientific Officer by October 15. The discussion continued on the preparation of the Consortium agreement, such document is not
requested but recommended by the commission to clarify and anticipate problems that can occur in the management of the project and also exploitation of some outputs with industrial applications.
For the WP activities was decided to provide as soon as possible all the possible information on the plant material that will be included or is already included in the different trials, the parameters that will be analyzed and protocols that will be used.
On Wednesday Morning the discussion was enlarged also to the participation of Dalibor Vojta (Legal Officer of the Project). A more specific discussion on legal and financial issues of the project was carried out, in particular on how organize the new project DOV with amendments described above. The project is now planned to have 3 reporting periods: at 12 months, at 24 months and at 42 months.

**WP 5 Dissemination**
The last section of the kick off meeting was dedicated to discuss and plan the dissemination activities. All the different tasks expected for WP5 were discussed and the main items confirmed.
The plan of meetings expected in the project table 2.1 was discussed and a first concrete draft of the main meetings was decided.
Up to now (Month 5) have been organized the first Web Conference (month 2) and the project Kick off (Month 5) meeting.

The discussion continued with following points:
- **Web Page.** What started has to be implemented with a better organization of the different sections for WPs and the addition of a restricted section for internal reporting. A list of stakeholders with links to their WebPages, ask to stakeholders to include in their webpage a link to the EUBerry webpage. All press releases, newsletters and podcasts. A section on news should be continuously updated also with news in different languages.
- **Newsletters.** A first newsletter should be prepared in short including information on the kick off meeting and the starting of the project. P1, 3 and 14 are responsible on the preparation of the newsletter as planned in the project and should then be disseminated by all partners.
- **Podcasts.** A program for podcasts should be prepared, either from the next general assembly including an interview of each partner team leaders. Podcasts of different activities organized from the different partners should be organized. P3 will be responsible to organize the podcasts that will be uploaded on the webpage.
- **Stakeholders.** For each meeting and dissemination activities the involvement of stakeholders should be promoted.

No other issue aroused from the discussion and the EUBerry kick off meeting was ended.
During the EPSO workshop on Plant Pigments and Human Health (http://www.epsoweb.org/workshop-plant-pigments-and-human-health) that was held in the Costa Brava, Spain, on 24-26th May 2011, IBET activities related with neuroprotective effects of berries polyphenols was presented by an oral communication.

From 17th to 20th October 2011, IBET team presented two posters (http://www.itqb.unl.pt/labs/disease-and-stress-biology/Project_euberry) at the 5th International Conference on Polyphenols and Health (ICPH) that took place at the Hotel Meliá Sitges, Sitges (Barcelona), Spain.

Meanwhile the effects of digestion on blackberries were presented on a poster in COST ACTION FA1005 – “Improving health properties of food by sharing our knowledge on the digestive process (INFOGEST)” at Le Croisic, on October 19-21 2011.

On 16th November on the scope of the “Forum 4 – Food Technology Quality and Safety” EUBerry activities developed by IBET, it was presented an oral communication entitled “Health benefits of berries”. This forum was organized by Food Technology, Biotechnology and Nutrition department from Polytechnic Institute of Agriculture of Santárem. The goal of this Forum was to promote knowledge and discussion of current issues linking different aspects of food, from production and processing technology, quality and safety, nutrition and health effects.

On 12th December, undergraduate students from the Technical Course in Agricultural Vegetable Production from the Agricultural school of Runa visited the Disease and Stress Biology laboratory (IBET). The EUBerry project was presented and a guided tour to the lab and greenhouses was done.
Blueberry Growers Day

17 November 2011
Amarante, Portugal

In the last November 17th took place, in the city of Amarante, the first Blueberry Growers Day a joint organization of Instituto Nacional de Recursos Biológicos (INRB) and the Centro Operativo e Tecnológico Hortofrutícola Nacional (COTHN), with the support of the European project EUBerry “The Sustainable Improvement of European Berry Production, Quality and Nutritional Value in a Changing Environment”. The meeting was a reply to the high number of grower’s requests about the possibility of growing blueberries in the agro-climatic conditions of the North of Portugal. It was prepared a broad technical programme in order to provide future growers with solid bases for the high important decisions that they have to make in order to establish a blueberry orchard.

In the morning participants had the opportunity to visit a small fruit farm, Naturpassion, Lda, where they look at all planting operations needed to do a correct blueberry planting. Plants were placed in raised beds covered with pine bark (Figure 1). During the visit all participants were able to discuss with the farmer the best cultivars suitable for this particular region. The cultivars used in this case were Ozark Blue, Legacy and Sky Blue.

In the afternoon three topics were discussed; Planting Material, Crop Management and Commercialization. To address the first topic, Planting Material, a specialist from a French nursery was invited to talk about blueberry propagation and the present worldwide breeding programs (Figure 2). The presentation focused on the important aspects of using certified material, the most important diseases to consider and observe during crop life, the use of the correct cultivar according with the agro-climatic characteristics of the region, the main challenges to the Northern Portuguese blueberry season at European level. The topic Crop Management was presented by the technician in charge for the biggest blueberry enterprise in Portugal (14 ha) which is now in full production (Figure 3). The main blueberry growing problems addressed were linked with; labor management, cost and returns and the difficult task of selling blueberries in the European market. It was also addressed the need of specific certification and the main reasons that lead the enterprise to change from conventional growing to organic production.

At coffee break all participants had the opportunity to taste several special made delicate cakes with blueberries and raspberries prepared by Casa da Calçada Chef at Amarante (Figure 4).
During the third part of the meeting it was discussed the theme **Commercialization** with a presentation done by the owner of a Portuguese marketing enterprise dedicated to export Portuguese small fruits (Figure 5). In her presentation was discussed the best blueberry season linked with market prices for the North production region. It was showed the advantage of harvest season in this region since it produces fruit after Spain and before the main European season. September seems to be the target month for Portuguese blueberry growers due to the short blueberry offer in this month. In this period southern hemisphere mainly Argentina is still no producing fruit which leads to high blueberry prices.

For the meeting 130 participants were registered and more than 100 were present between growers, researchers/professors, consultancy enterprises and others linked with the industry (Figure 6).

Results of a short questionnaire done to the participants showed that among people present there was an interest of planting more than 100 hectares of blueberry with an area of 18 ha already planted (Figure 7).

As final Meeting conclusion it was given emphasis to the potential of the Portuguese northern region for blueberry growing for the fresh European market. However, it is of great importance the beginning of a specialized growers association due to the small farm size in this region linked with the high quality demanding European markets.
EUBerry meetings plan:

2012

- Workshop 1 on cultivation systems (WP2) March 2012 month 11 – organized by P13 Sant'Orsola (IT) – red zone, opened to growers association and industries.
- Management meeting – a WP Leaders meeting aimed to set up the first year reporting period. It will be hosted by P14, in April at Faro PT (red zone) and will be combined with a training Colloquium addressed to local SMEs.
- Generally Assembly – to be expected in June 2012, possible location Venlo NL – green zone, if it will be possible to have space in the ISHS Symposium on Superberry. Colleagues from P9 should explore this possibility, if it will not be possible another location will be identified.

2013

- Germany (April – end June 2013) or France (September-October) (green) School 1 – General Assembly– Advisory Board – green zone.
- Workshop 2 WP meeting Norway – blue zone.

2014

- Spain/Huelva – red zone – March - School 2 – General Assembly – Advisory Board
- Work shop 3 : WP1 and 3 Breeding biotech biochemistry, Ancona IT (red zone)
- Final Meeting – Nov 2014 or April 2015 Poland

- ISHS VII International Strawberry Symposium
  February 18-22, 2012, Beijing (China):
  Prof. Bruno Mezzetti, Università Politecnica delle Marche, Italy Leader of the EUBerry Project will make an Invited lecture: “Integrating Breeding and Biotech for Improving Strawberry Nutritional Quality”. Also Dr. José M. López-Aranda, Agricultural and Fishery Research and Training Institute of Andalusia, Spain will present an Invited lecture: “MB Alternatives (Chemical & Non-chemical) for Strawberry Cultivation in Conventional Areas of Production”. Several project team members will participate and present results from EUBerry trials.

- May 18, 2012, it will be the First International "Fascination of Plants Day" (www.plantday12.eu). P4 and P14 in a joint effort will present an event for general public based on EUBerry activities. The "Fascination of Plants Day", launched by the European Plant Science Organisation (EPSO — www.epsoweb.org) has been already adopted by more than 25 countries. More than 60 scientific institutions, universities, botanical gardens, and museums, together with farmers and companies, have already announced that they will open their doors, with a variety of plant-based events for all interested people from toddlers to grandparents.
Poster presented at Geisenheim Research Centre Open-day (September 2011) (P10)

Poster presented at X International Rubus and Ribes Symposium (Servia, June 2011) (P14)

Poster presented at Blueberry Growers Day (Amarante, November 2011) (P14)
Strawberry Polyphenols Attenuate Ethanol-Induced Gastric Lesions in Rats by Activation of Antioxidant Enzymes and Attenuation of MDA Increase

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Abstract

Background and Aim

Free radicals are implicated in the aetiology of gastrointestinal disorders such as gastric ulcer, colorectal cancer and inflammatory bowel disease. Strawberries are common and important fruit due to their high content of essential nutrient and beneficial phytochemicals which seem to have relevant biological activity on human health. In the present study we investigated the antioxidant and protective effects of three strawberry extracts against ethanol-induced gastric mucosa damage in an experimental in vivo model and to test whether strawberry extracts affect antioxidant enzyme activities in gastric mucosa.

Methods/Principal Findings

Strawberry extracts were obtained from Adria, Sveva and Alba cultivars. Total antioxidant capacity and radical scavenging capacity were performed by TEAC, ORAC and electron paramagnetic resonance assays. Identification and quantification of anthocyanins was carried out by HPLC-DAD-MS analyses. Different groups of animals received 40 mg/day/kg body weight of strawberry crude extracts for 10 days. Gastric damage was induced by ethanol. The ulcer index was calculated together with the determination of catalase and SOD activities and MDA contents. Strawberry extracts are rich in anthocyanins and present important antioxidant capacity. Ethanol caused severe gastric damage and strawberry consumption protected against its deleterious role. Antioxidant enzyme activities increased significantly after strawberry extract intake and a concomitantly decrease in gastric lipid peroxidation was found. A significant correlation between total anthocyanin content and percent of inhibition of ulcer index was also found.

Conclusions

Strawberry extracts prevented exogenous ethanol-induced damage to rats’ gastric mucosa. These effects seem to be associated with the antioxidant activity and phenolic content in the extract as well as with the capacity of promoting the action of antioxidant enzymes. A diet rich in strawberries might exert a beneficial effect in the prevention of gastric diseases related to generation of reactive oxygen species.

http://dx.plos.org/10.1371/journal.pone.0025878

Neuroprotective effect of blackberry (Rubus sp.) polyphenols is potentiated after simulated gastrointestinal digestion

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Abstract

Blackberry ingestion has been demonstrated to attenuate brain degenerative processes in rodents with the benefits ascribed to the (poly)phenolic components. The aim of this work was to assess the efficacy of blackberry polyphenolics in a neurodegeneration cell model before and after simulated gastrointestinal digestion. Digested blackberry metabolites protected neuroblastoma cells from H2O2-induced death at low, non-toxic levels that approach physiologically-relevant serum concentrations. However, the original extracts were not protective even at fivefold higher concentrations. This potentiation may reflect alterations in the polyphenolic composition caused by the digestion procedure, as detected by liquid-chromatography-mass spectrometric analysis. This protection was not caused by modulation of the intracellular antioxidant capacity or through alteration of glutathione levels, although the
original extract influenced both of these parameters. This work reinforces the importance of evaluating digested metabolites in disease cell models and highlights the possible involvement of other mechanisms beyond antioxidant systems.

**Highlights**
► We evaluated undigested and *in vitro* digested blackberry metabolites. ► Blackberry digested *in vitro* showed different phenolic composition. ► Physiological concentrations of undigested metabolites did not protect neurons. ► Digested metabolites protected neuroblastoma from death contrary to undigested ones. ► Mechanisms beyond cellular antioxidant systems are involved.

**Keywords:** Blackberry; *In vitro* digestion model; Neurodegenerative diseases; Phenolic compounds


**Nutrition 28 (2012) 9-19**
The strawberry: Composition, nutritional quality, and impact on human health.

Effects of air and soil temperatures on the chemical composition of fruit and agronomic performance in strawberry (*Fragaria x ananassa* Duch.)

**Black Currants**

**Journal of Applied Botany and Food Quality 84, 40 - 46 (2011)**
Effects of cultivar, yield, berry weight, temperature and ripening stage on bioactive compounds of black currants.
EUBerry, la ricerca applicata ai piccoli frutti

Sarà presentata domani all’Università Politecnica delle Marche il nuovo progetto finanziato dal settore Programma quadro europeo. In arrivo due nuove varietà di fragola: Rondine e Christine.

Sarà presentato domani alla 12, nella sala Rattoi dell’Università Politecnica delle Marche (piazza Roma 22), il nuovo progetto “EUBerry” (Evoluzione e miglioramento associativo della produzione, del mercato e della qualità dei germplasmì di melarossa e melarossa selvatica). Il progetto è finanziato da un’alleanza, avviata dal settore Programma quadro di ricerca europeo (FP7) sulla problematica genetica e di coltivazione per migliorare le caratteristiche qualitativa e quantitativa dei piccoli frutti.

Per l’occasione saranno presentate anche due nuove varietà di fragola di origine sull’Università Politecnica delle Marche, selezionate per le loro diverse caratteristiche di spunto di miglioramento, produzione, qualità organoleptica e nutrizionale dei frutti.

In questa sessione, oltre alle iniziative scientifiche, verrà presentato un cibo verdisco, con vista al campo sperimentale, presso l’Azienda agricola “P. Rosati” di via Borgo Ruffo 23 ad Agrigento (Sicilia).
Promoting berries in Europe

Recently approved FP7 project includes ITQB

The Disease and Stress Biology Laboratory at ITQB is involved in a recently approved European project on berry fruits, submitted to the Framework Programme 7 (FP7) Food, Agriculture and Fisheries, and Biotechnology 2010 Call, project “EUBerry,” was selected out of a total of 9 proposals.

The consortium, originated from a COST Action in this field, includes 12 partners from 10 different European countries and involves 10 Universities, Research Centres and 3 SMEs. The Portuguese team, located in the Oeiras Campus, is headed by Claudia Lentos (ITQB) and Maria João Fernandez (IESC). This topic was finally included in the 2010 FP7 work programme. Now, and after a very competitive call, EUBerry is finally approved. As participants put it “the road to FP7 is difficult but not impossible”.

It was the Portuguese National Delegation that brought the attention of the European Commission to the berry topic. After a joint effort – started as early as 2007 – of Claudia Lentos (ITQB) and Maria João Fernandez (IESE) this topic was finally included in the 2010 FP7 work programme. Now, and after a very competitive call, EUBerry is finally approved. As participants put it “the road to FP7 is difficult but not impossible”.

Web links

EUBerry: www.euberry.univpm.it/

GEN RES project 036: European Small Berries Genetic Resources, www.bordeaux.inra.fr/genberry/

GEN RES 071: Ribesco, www.mtt.fi/Ribesco


P1 http://www.agr.univpm.it/Engine/RAServePG.php

P2 www.insad.pl

P3 www.hutton.ac.uk/


P14 (INRB) http://www.inrb.pt/inia