



BRESOV meets BEAN_ADAPT

Joint conference organised by
Polytechnic University of Marche



10-12 September 2018, Ancona, Italy

The conference was a bridge, a link between two important projects:

BEAN ADAPT			BRESOV			
is an ERA-CAPS project, developed by a consortium of five European and American research entities			is a HORIZON 2020 project developed by a consortium of 22 research entities from Europe, Asia and Africa			
THE MAIN AIM						
to dissect out the genetic basis and phenotypic consequences of the adaptation to new environments of the common bean and its sister species, the runner bean.			to create a pipeline for crop improvement that will accelerate the production of high-quality organic seeds for breeders and farmers around the world.			
Comparative analysis of the genetic diversity and population structure between the American and European germplasm	Develop a unified information system by linking up the data to the (EURISCO).	Promote the efficient use of <i>Phaseolus</i> PGRs by the development of an integrated information system	Improving competitiveness of three important vegetable crops in organic production	Extending the genetic basis of organic breeding	Enhancing existing and newly developed varieties for organic vegetable production	Increasing the plants tolerance to biotic and abiotic stress
BEAN AND RUNNER BEAN			BROCCOLI, SNAP BEAN AND TOMATO			

Programme

- **Tuesday, 11 September 2018**
BEAN_ADAPT and Associated partners' Open conference

Project and results presentation

- R. Papa, UNIVPM: BEAN_Adapt Introduction
- E. Belluci, UNIVPM: BEAN_ADAPT collection – phenotyping
- S.A. Jackson, UGA: High-throughput genotyping of Bean_ADAPT's collection
- S. Alseekh, MPIMP: The common bean metabolome
- A. Graner, IPK: IPK common bean collection

Oral presentations – part I

- U. Scholz, IPK: BEAN_ADAPT Warehouse – A roadmap to an interactive web tool
- G.G. Vendramin, CNR: The contribution of CNR to BEAN_ADAPT

- M. Marsella, ITPGRFA, FAO: Digital object Identifiers to the rescue! Making research on plant genetic resources more easily findable
- E. Frontoni, UNIVPM: Machine Learning approach on BEAN_ADAPT collection

Oral presentations – part II

- M. Aguilar, IBBM: Symbiotic interaction between common beans and rhizobia
- P. Pauls, UOGUELPH: Trait gene discovery in beans
- E. Trucchi, UNIFE: Ancient genomes shed light common bean spatio-temporal patterns of domestication in South Africa
- B. Pipan, AIS: Characterisation and utilization of *Phaseolus* European Germplasm for sustainable crop improvement
- F. Sparvoli, IBBA, CNR: Improvement of bean seed nutritional quality traits
- P. Gepts, UCDAVIS: Brazilian bean
- P.E. Mc Clean, NDSU: *Phaseolus* Reference Genome Sequencing and Applications

General discussion, future perspectives and closing remarks.

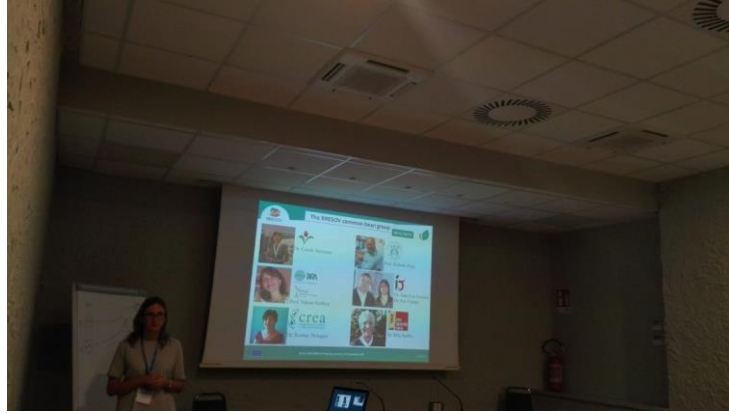
➤ **Wednesday, 12 September 2018**

- **BRESOV Bean Group and BEAN_ADAPT meeting**
- **BRESOV Bean Group restricted meeting**

The project is structured in six WPs and in three focus crop species: broccoli, bean and tomato. The Ancona conference envisaged the participation and the activity of BRESOV BEAN Group.

The **BEAN crop group includes** the following partners:

No	Partner institution	Principal investigator
1	Universita Politecnica delle Marche (UNIVPM), Italy	R. Papa
2	Statiunea de Cercetare Dezvoltare Pentru Legumicultura Bacau (VRDS), Romania	C. Brezeanu
3	Consiglio per la Ricerca in Agricoltura e l'analisi dell'economia (CREA), Italy	R. Beleggia
4	Servicio Regional de Investigacion y Desarrollo Agroalimentario del Principado de Asturias (SERIDA), Spain	J.J. Ferreira
5	ProSpecieRara (PSR), Switzerland	B. Bartha
6	Institut National de la Recherche Agronomique (INRA), France	V. Geffroy
7	University of Basilicata (UNIBAS), Italy	T. Gioia



The aim of the meeting was to report partial results of the first year of investigations and to update the workplan so that the objectives and deliverables could be achieved successfully.

Presented reports:

- R. Papa, UNIVPM: BRESOV - a brief introduction to the project topic with the presentation of the structure and activities planned for the current year
- E. Bitocchi, UNIVPM: Overview on the activities planned for common bean on BRESOV
- C. Brezeanu, VRDS: Progress report - Romania
- T. Gioia, UNIBAS: Progress report - Italy
- J.J. Ferreira, SERIDA: Progress report - Spain
- R. Beleggia, CREA: Pod quality analysis
- V. Geffroy, INRA: Resistance/ tolerance to biotic stresses (skype meeting)
- B. Bartha, PSR: Post-harvest evaluation and Panel Tests

Discussions, conclusions and plans.

Other topics of discussion:

- the exchange of fresh and dry genetic material to carry out the proposed investigations,
- rights and obligations regarding intellectual property and confidentiality
- identification of journals for publishing
- the intranet communication procedure, using the Project Angel platform
- advertising and visibility of the project,
- the reporting procedure inside the group taking in account the high volume of information.

CONCLUSIONS

BRESOV ensures benefits through its development, results, implementation and impact, and it can act as a model to be applied to other crops, having the purpose to create **viable solutions for food security and clean environment**.

BRESOV activities stimulate us as **to change** our view in relation to the nature, which needs, asks and deserves a better approach.

BRESOV is the **right place to practice** what we have learnt, and to use our expertise to provide a strong impact for the future.

BRESOV is **a platform of continuous learning**, which brings together different minds, ideas, plans, expertise, aimed to work in the same direction.

Creola Brezeanu