

P3.69 - Agropolis Resource Center for Crop Conservation, Adaptation and Diversity (ARCAD): A new open multi-function platform devoted to plant agrobiodiversity

Pham JL¹, Ahmadi N², David J³, Engelmann F⁴, Ghesquière A⁵, Glémin S⁶, Labouisse JP¹, Leclerc C⁷, Noyer JL⁷, Prosperi JM⁸, Risterucci AM⁷, Ronfort J⁸, Roumet P⁸, Ruiz M⁷, Santoni S⁸, Seguin M⁷, This P⁸, Thuillet AC⁴, Vigouroux Y⁴

¹ Agropolis Fondation, Montpellier, France

² UR AIVA, CIRAD, Montpellier, France

³ SupAgro, Montpellier, France

⁴ UMR DIAPC, IRD, Montpellier, France

⁵ UMR GDP, IRD, Montpellier, France

⁶ ISEM, Univ Montpellier 2-CNRS, Montpellier, France

⁷ UMR DAP, CIRAD, Montpellier, France

⁸ UMR DIAPC, INRA, Montpellier, France

ARCAD is an initiative supported by Agropolis Fondation and the Region Languedoc Roussillon (France). ARCAD aims at setting up a new open multi-function (conservation, research and training) platform devoted to the assessment and better use of plant agrobiodiversity in Mediterranean and tropical regions. The programme's scientific agenda will prioritize the study of history and patterns of crop domestication and adaptation as well as the analysis of key parameters underpinning adaptation and diversity structure, at various time scales, through studies of evolutionary genomics, population genetics and social sciences. The research will focus on Population comparative genomics, Crop adaptation to climate change and Cereal crops in Africa. These activities will be complemented with technological and methodological components for the conservation (DNA bank, cryopreservation) and analysis (bioinformatics, linkage disequilibrium) of crop diversity. A major objective of the programme is also to set up a demand-oriented capacity building platform, based upon the educational facilities offered by universities in Montpellier and the development of specific training modules. The ARCAD programme is jointly developed by CIRAD, INRA, IRD, Montpellier SupAgro and University of Montpellier 2, in partnership with numerous South and international institutions. As an open platform, ARCAD will continuously seek the involvement of interested partners.

P3.70 - Genetic diversity assesment of Italian common fig (*Ficus carica* L.) using microsatellite markers

Ponnaiah Maharajah¹, Ghazi Hassan¹, Aung Htay Htay¹, Ciarmiello Loredana Filomena², Piccirillo Pasquale², De Luca Antonio², Porceddu Enrico^{1,3}

¹ Scuola Superiore Sant'Anna, International Doctoral Programme on Agrobiodiversity-Plant Genetic Resources ENEA-Cr. Casaccia, Rome, Italy

² Istituto Sperimentale per la Frutticoltura Sezione di Caserta, Italy

³ DABAC, University of Tuscia, Via S. Camillo de Lellis, 01100 Viterbo, Italy

The common fig (*Ficus carica* L.) is native to the western Asia and was later dispersed to the Mediterranean area. The fig was one of the first plants ever to be cultivated by humans. Kislev *et al.* (2006) published in *science* that fig trees could have been the first domesticated plant of the Neolithic Revolution, preceding cereal domestication by about one thousand years. Archaeology guide, K. Hirst (2006), says figs were domesticated "five thousand years earlier" than millet or wheat. With this historical background, fig attracts the scientific researchers to characterize using molecular tools to unravel the genetic wealth it possesses.

Aimed at the analysis of genetic diversity in common fig collected from Italy, we characterized around 88 accessions using 37 polymorphic microsatellite markers.

There is generally a paucity of information available for diversity pattern among the Italian common figs and in particular till date no molecular work has been made with Italian common fig genotypes. Henceforth this work was made to analyse the Italian common fig using microsatellite markers and this assessment made possible to unravel the genetic diversity for which there was null information so far.

Both morphological and molecular characterizations were made and will be precisely presented in the poster.