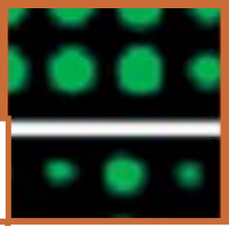
South African participation in the European Union's Sixth Framework Programme for Research

FOOD SAFETY AND QUALITY

ESASTAP

european - south african science and technology advancement programme



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EU-SOL

High Quality Solanaceous Crops for Consumers, Processors and Producers by Exploration of Natural Biodiversity

High quality and healthy tomato and potato varieties with improved traits for the consumer, processor and producer is at the heart of a five year research project in which 53 partners from around the world are participating. The EU-Sol project is coordinated by the Centre for BioSystems Genomics at the Wageningen UR in the Netherlands.

Starting year: 2005

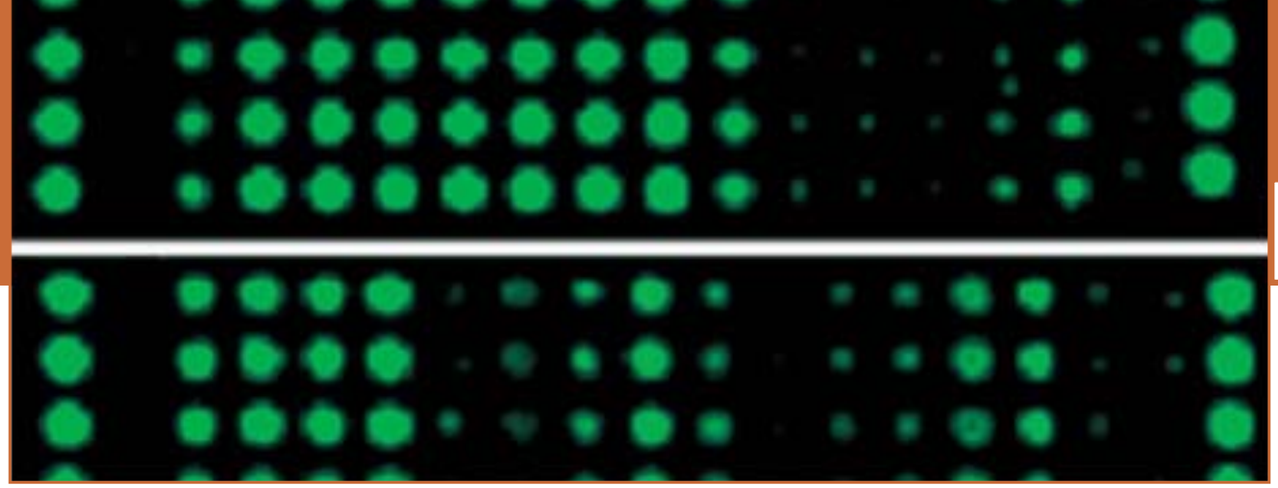
FP6 instrument: Integrated Project

Why this project?

Quality and wholesomeness of food and food products are two issues addressed prominently by society, especially in relation to disease prevention and to the increasing preference of consumers for "regional" and "niche" foods. EU-SOL aims to understand the factors that affect consumer-driven and environmentally-directed quality of the two most important vegetable products in the European Union, tomato fruits and potato tubers, both belonging to the *Solanaceae*.

What does the project hope to achieve?

EU-SOL is attempting to dissect the genetic and molecular components that control quality traits by applying state-of-the-art genomics and post-genomics research approaches. It will also aim to sequence selected gene-rich regions of the tomato genome, and will use this knowledge to



develop genome wide tomato microarrays as part of a gene function discovery platform.

South African researchers' contribution:

Professor Dave Berger of the Forestry and Agricultural Biotechnology Institute (FABI) of the University of Pretoria applies microarray technology to identify DNA markers linked to nutrition and health traits in tomatoes. The African Centre for Gene Technologies (ACGT) microarray facility - run by Professor Berger - has a demonstrated track record in DNA microarray technology in both gene expression profiling of crop plants and the identification of DNA markers. (See www.microarray.up.ac.za)

Contact us

To discuss South African Participation in Theme 5 (Food Safety and Quality) of FP6 and the upcoming Theme 2 (Food, Agriculture and Biotechnology) of FP7, please contact:

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