



# COST Action 853 Agricultural Biomarkers for Array-Technology



Chairman: Jürg E. Frey<sup>(a)</sup>

Vice-Chairman: Günter Adam

Scientific Secretary: Boukje Stol

<sup>(a)</sup>Agroscope FAW Wädenswil, Swiss Federal Research Station for Horticulture, P.O. Box 185, CH-8820 Wädenswil, Switzerland

## Signatories

Austria	Cyprus	France	Italy	Poland	Switzerland
Belgium	Czech Republic	Germany	Lithuania	Portugal	United Kingdom
Bulgaria	Denmark	Greece	Netherlands	Slovenia	
	Finland	Hungary	Norway	Spain	

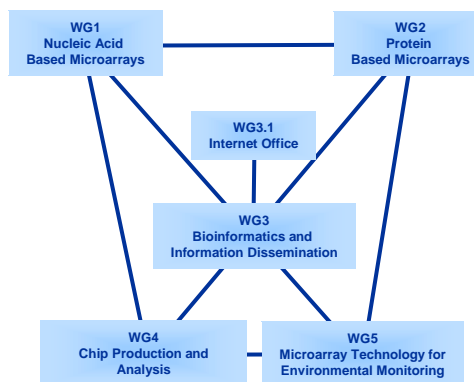
## Objectives

The main objective of COST Action 853 is to establish and support **Microarray technology** - in the form of nucleic acid- and protein-based arrays - as a **new tool for breeding, diagnosis, and high throughput screening in the field of agriculture.**

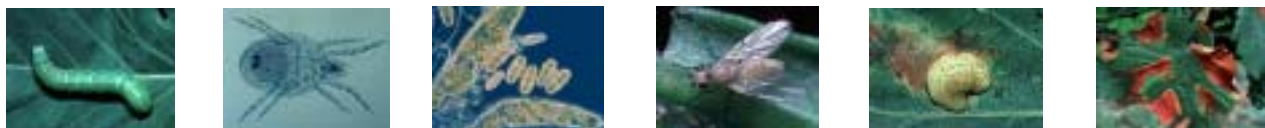
The need for a flexible system that allows molecular diagnostics of large sample sizes of many species has long been recognised. However, current technology generally requires focusing on narrow taxonomic groups. Microarray technology, being based on highly parallel simultaneous analysis, has shown its potential for large-scale genome analysis. The technology allows for simultaneous querying of hundreds of species specific markers and will thus enable the production of microarray chips that can be used for larger taxonomic groups such as the entire bacteria or, in higher eukaryotes, for example the entire class of insects.

The Action that was launched in March 2002 and to date involves 21 participating countries. Information can be obtained on our website under <http://www.COST853.ch>

## Working Groups



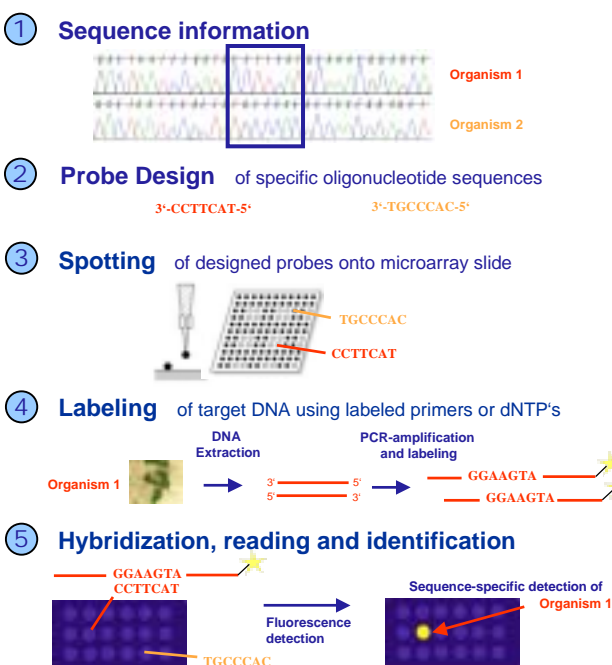
## Large diversity of target organisms



Photographs: mactode

## Microarray-Technology: Evaluation and development of nucleic acid and protein arrays

### Example 1: Sequence specific approach



### Example 2: Genome marker approach

