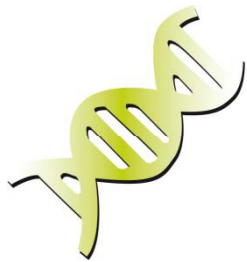


Triticeae Genome



Genomics for Triticeae improvement for food, feed, and non-food uses

Catherine Feuillet

INRA Clermont-Ferrand (France)

Triticeae Genome

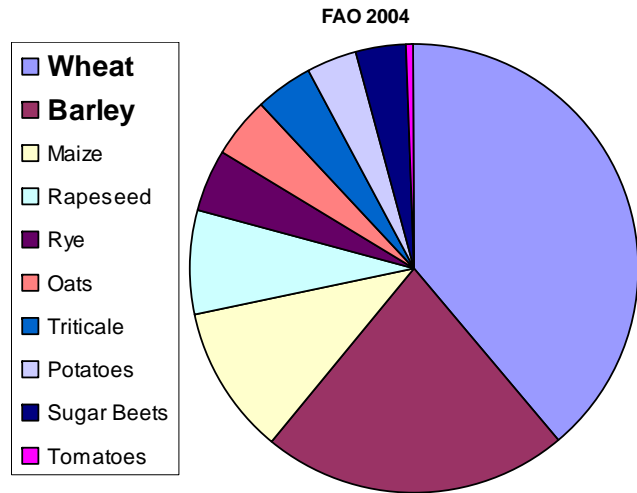
Workshop on twinning opportunities
between EU and MERCOSUR

Buenos Aires May 7&8, 2009



Triticeae genomics can contribute to the European Knowledge-based bioeconomy

EU crop production (harv area Ha)



wheat (87 Mt vs 64 in USA) and **barley** (42 Mt vs 12Mt in Canada) are the most important cereal crops grown in Europe

Europe is a key player in barley and wheat research (scientific know-how and breeding history)

- A few research programs dedicated to plant genomics and none specifically to cereal genomics in the last FP5 and 6

- New Strategic Research Agenda Plants for the future:



- FP7 first call (Dec 2006) :

KBBE-2007-1-2-02: “**Genomics for cereal improvement for food, feed and non-food uses**”



wants to

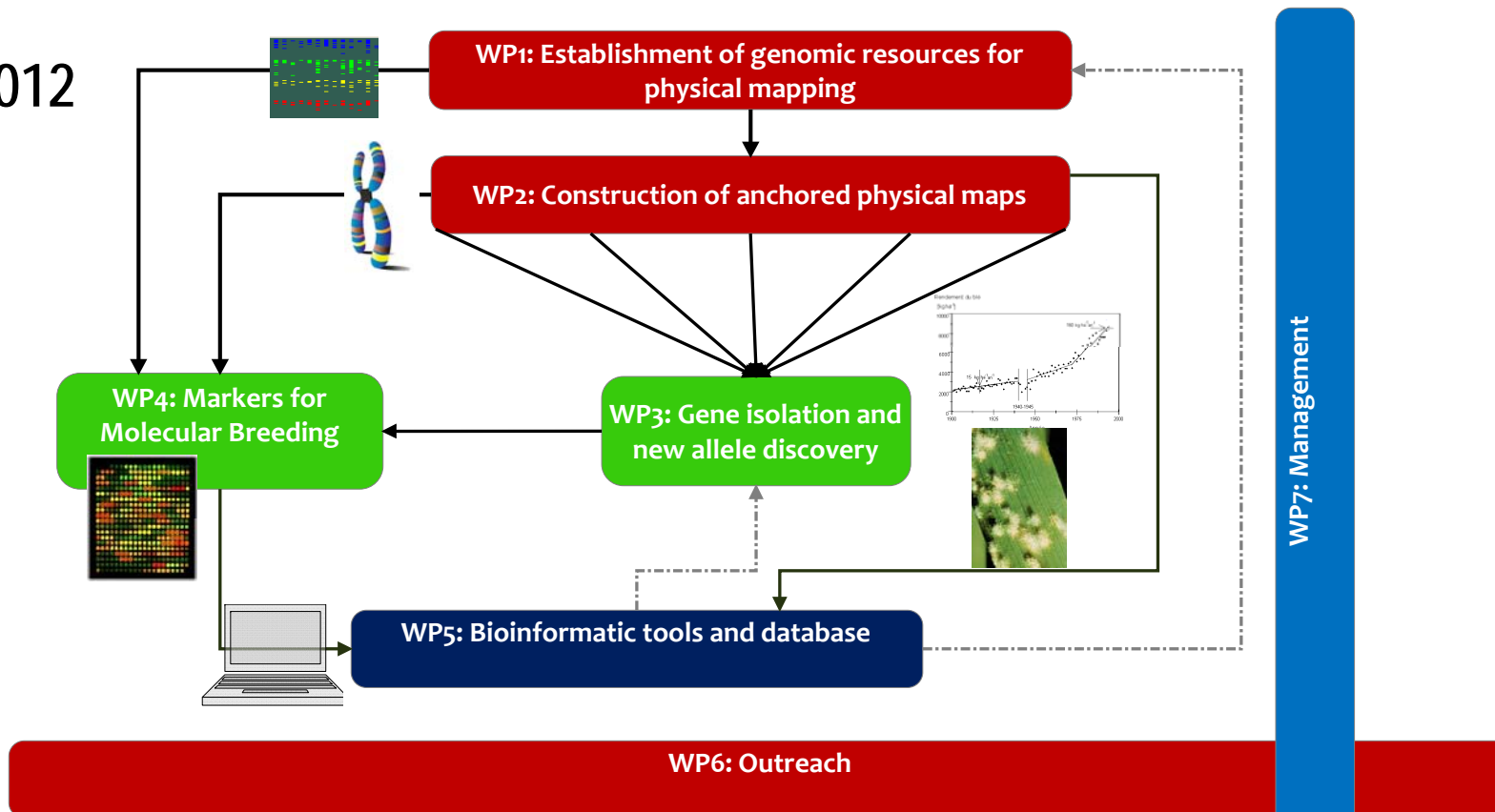
Achieve significant progress in Triticeae genomics and support efficient breeding of improved varieties for European agriculture

through

- 5 Work Packages that integrate fundamental and applied research
- The integration wheat and barley genomics to capitalize on synergies between these 2 essential Triticeae species
- A collaboration between 14 public research institutes, 2 private breeding companies and 1 managing body recognized for their excellence worldwide
- A project of 7.5 M€ supported by the EU commission (5.3 M€) and the individual partners institutes and companies
- A network of international collaborators and a complete coordination with other international initiatives



2008-2012



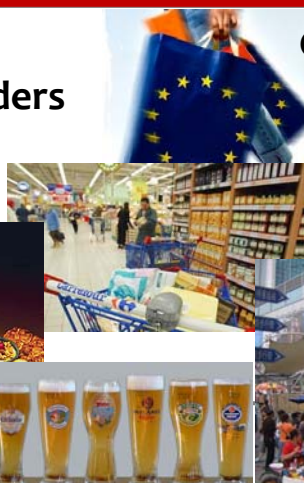
Farmers



Breeders



Consumers



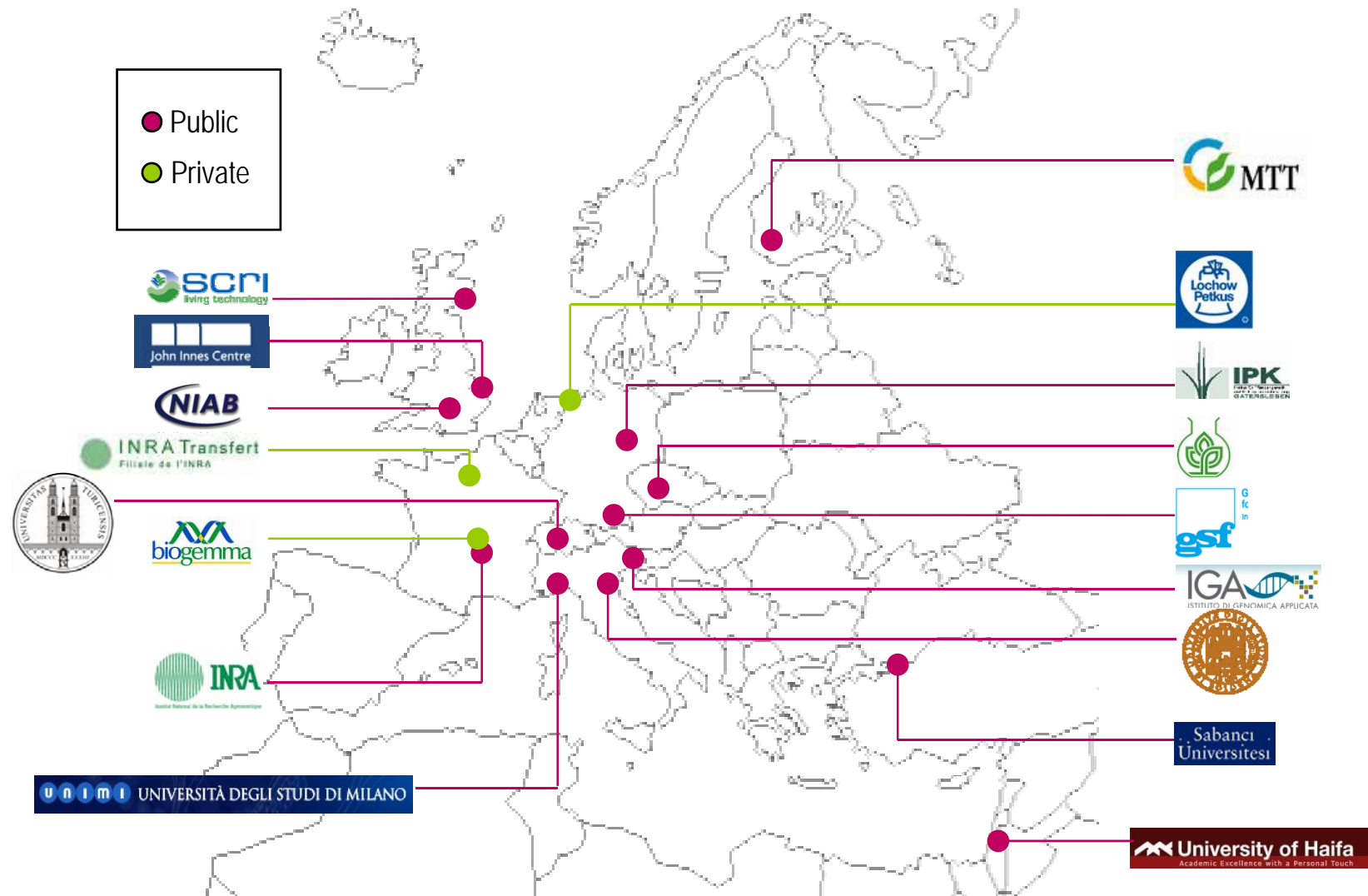
Scientists



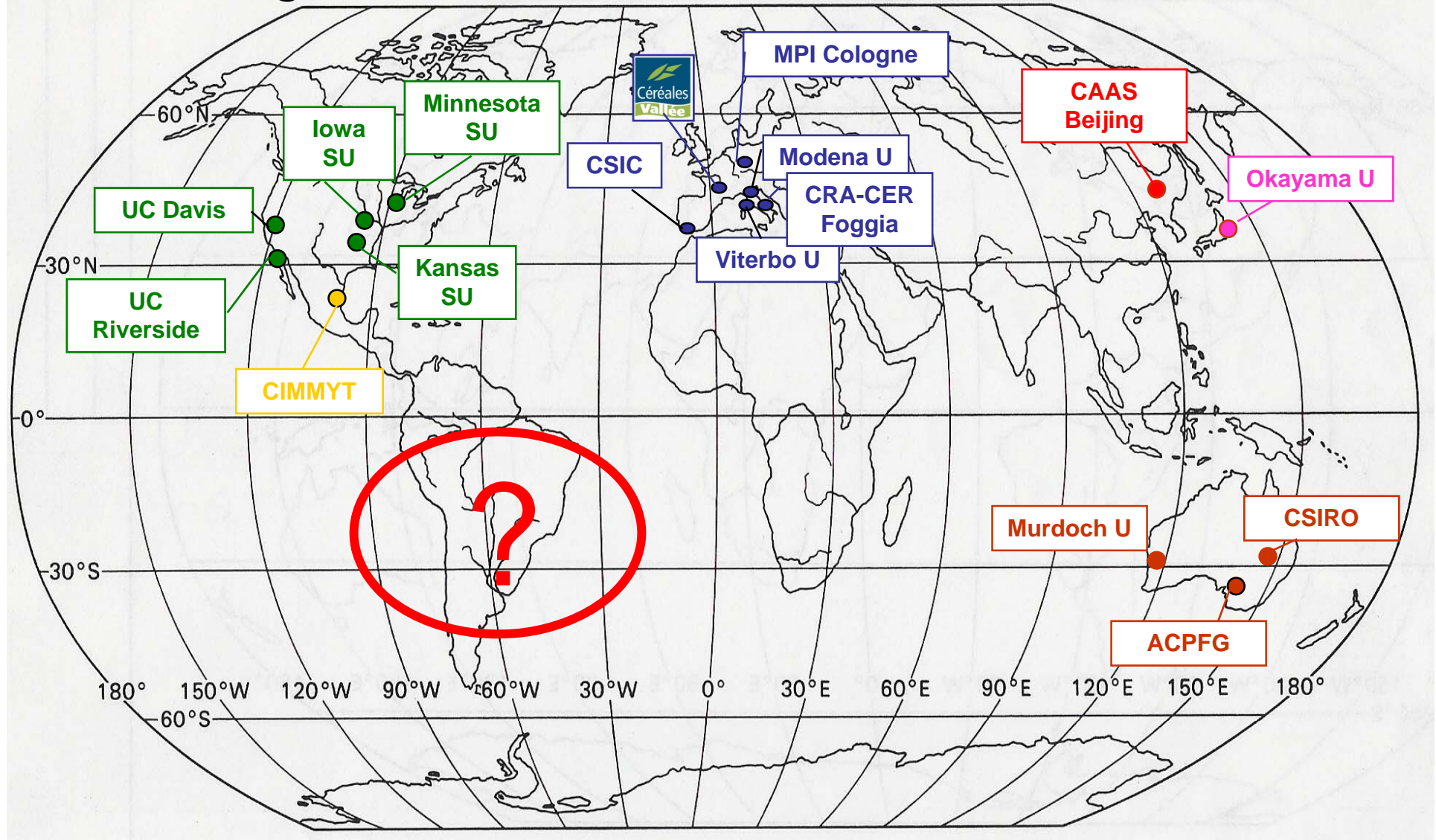
Triticeae Genome



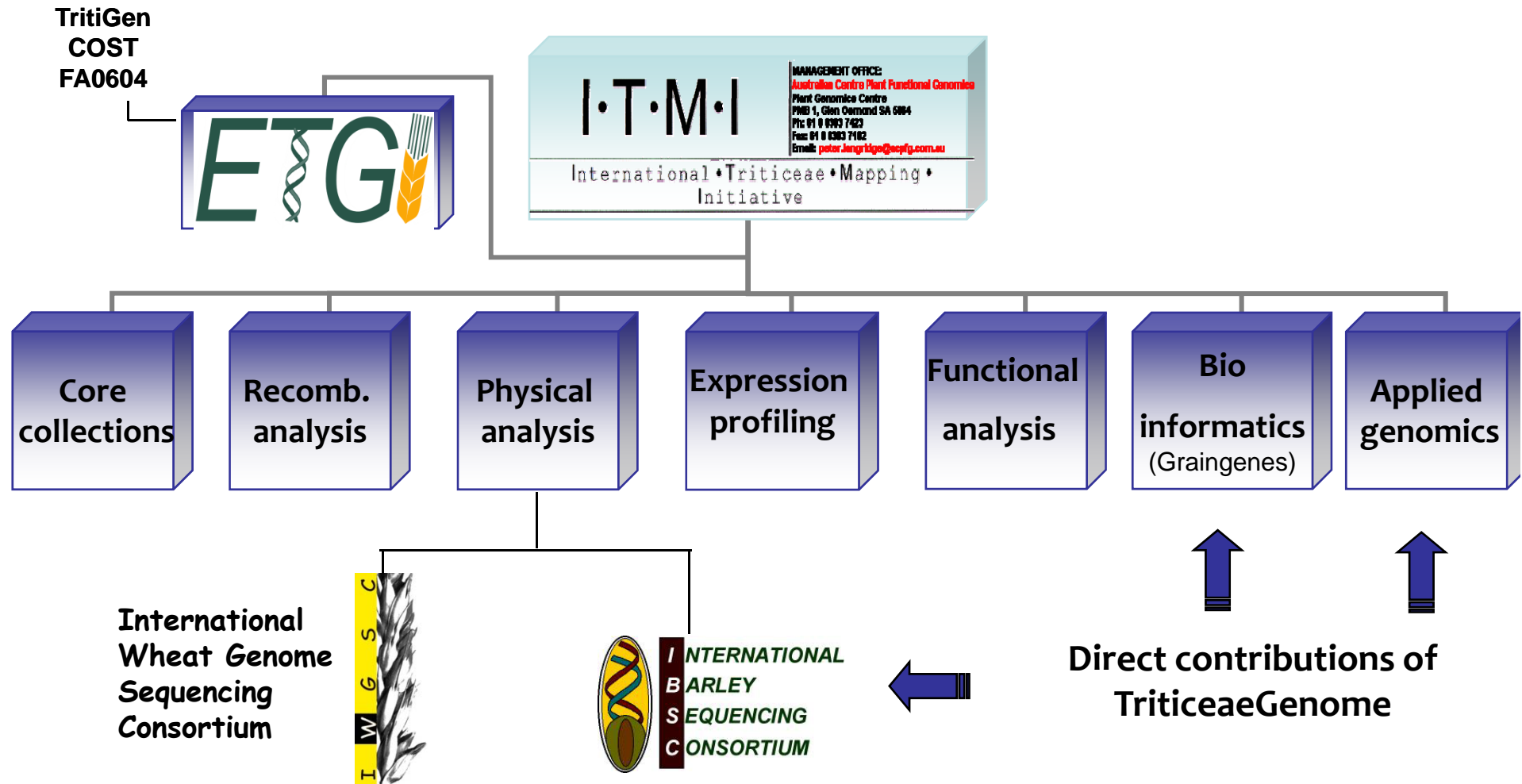
17 European Partners



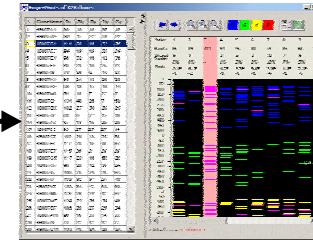
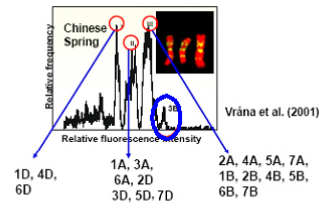
A large network of international collaborators



TriticeaeGenome is part of international Triticeae initiatives



WP1: Establishment of genomic resources for physical mapping



➤ 1A, 1B, 3Bv2, 3D

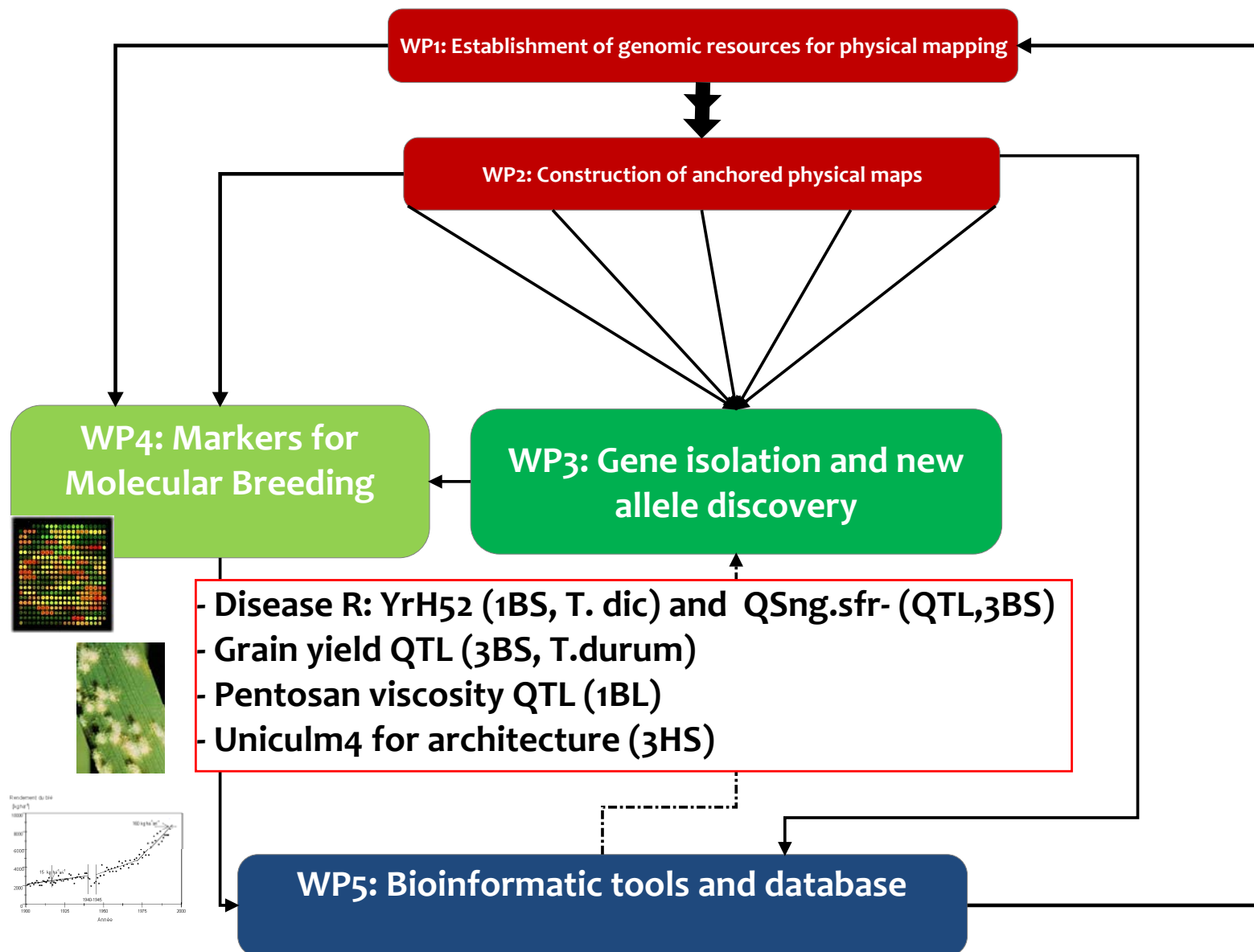
WP2: Construction of anchored physical maps



WP4: Markers for Molecular Breeding

WP3: Gene isolation and new allele discovery

WP5: Bioinformatic tools and database



WP6: Dissemination

- Provide training in emerging technological approaches
- Disseminate results and transfer technology to industry

Tasks:

• **9 Training workshops** (BAC fingerprinting, chromosome sorting, physical map assembly and anchoring, transposon-based fingerprinting and polymorphism methods, consensus mapping and QTL analysis, high through-put genotyping , association mapping, map based cloning)

- Website : **www. triticeaegenome.eu**
- Dissemination at conferences, publications....



WP7 : Management

• **Interactions with other on-going projects (WHEATBIOTECH MERCOSUR?)**

- Co-ordination of scientific and financial activities according to the work plan
- Monitoring results to ensure scientific quality and fulfillment of the planned objectives
- Prepare the financial and technical reports for the commission

