Plants are an important source of food in human diet. Given the world demographic growth and the forecasted climate change, it is becoming a major challenge for human society to provide sufficient amount of high nutritional and sensory quality food. To cope with these issues there is a need for a second Green Revolution that enables higher productivity in the face of changing climate conditions. In the last decade, increasing productivity of main plant crops and the nutritional content in fruit crops have gained momentum using classical breeding and biotechnological methods. Resonate with this context, the workshop organized under the auspices of the COST Action FA1106 “QualityFruit” will gather selected worldwide experts working either on cereals, the basis of our daily food, or on fruit crops, the major source of the necessary healthy nutrients of our diet.

The aim of the meeting is therefore to present recent advances and prospects in plant research dealing with the challenge of increasing productivity and nutritional value of plant food crops. The workshop is planned in four sessions: a) breeding for staple food, b) biotechnological approaches, c) overcoming limitation imposed by climate changes, d) genotype x environment interaction.

The relatively small number of participants in this workshop will favor scientific exchange between experts in the field and will provide a good starting point for scientists willing to introduce productivity and nutritional value aspects in their research programs.

The specific objectives of this COST Action FA1106 “QualityFruit” workshop are:

* Increase awareness of COST FA1106 members about the importance of both productivity and nutritional and health value of plant crops.
* Foster the link between COST FA1106 and other researchers in the field to favor the development of a Food Crop Plant Community in Europe.
* Present the latest research data on Plant Breeding and Biotechnology in crop plants (with an emphasis on fleshy fruit) in terms of improvement of yield and nutritional content in the face of climate change.