

**PIDICEUVE: A PROJECT FOR COMPARATIVE LARGE-SCALE GENE
EXPRESSION ANALYSIS OF GRAPE CULTIVARS GROWN IN THE
OLTREPO AREA IN NORTHERN ITALY**

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The genetic determinants of grape quality are largely unknown in *Vitis*, as the factors that interact at the cellular and molecular level to cause differences in fruit quality are not understood.

We describe a project (acronym: PIDICEUVE) aimed at studying fruit ripening in grapevine using large-scale gene expression analysis. This project is part of a larger one which integrates transcriptomics, proteomics and metabolomics. Five different cultivars widely cultivated in Northern Italy, including four red-skinned cultivars (Croatina, Barbera, Pinot noir, Pinot gris), and one white-skinned cultivar (Riesling italico) have been compared during the ongoing of ripening starting from veraison and until full maturation.

Gene expression analysis has been performed using the Affymetrix GeneChip™ arrays. Preliminary results of intra- and intervarietal comparison of gene changes are reported and discussed.