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## **GrapeGen - A Genomic Approach to the Identification of the Genetic and Environmental Components Underlying Berry Quality in Grapevine**

<b>Status</b>	Past
<b>Competition</b>	Genoma España/Genome Canada
<b>Sector</b>	Agriculture
<b>Genome Centre</b>	Genome British Columbia
<b>Project Leaders</b>	Steven Lund (Canada) & José Martinez Zapater (Spain)

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### **Project Description**

Grapevine is the most economically important fruit species worldwide, with more than 7.4 million hectares planted in vineyards. Grapevine is cultivated for its fruit to produce table grapes, juice, and raisins. Grapevine berries are also the basis for high added-value wine and spirits products.

Grapevine is important for Spain, which has more than 1.2 million hectares or approximately 1/7 of the world's total vineyard land mainly dedicated to wine production. Furthermore, with more than 50,000 hectares of table grape, Spain is the second largest European producer after Italy with most of Spain's production being dedicated to the foreign market.

Canada is the youngest wine-producing region in the world. However, the wine industry in Canada has developed rapidly over the past ten years, and 7,000 hectares are currently planted in wine grapes. The wine industry contributes significantly to the economies of producing provinces, mainly Ontario and British Columbia, through sales and tourism revenues.

Complementary areas of expertise in Canada and Spain will facilitate innovative applications of genomics technologies to problems facing the grape and wine industries and, ultimately, promote knowledge transfer between Spain and Canada in the public and private sectors.

According to Dr. Lund: "The field of grapevine genomics is in its infancy, and opportunities abound for major beneficial discoveries. Understanding how genes control berry ripening in different growing environments will provide new information to assist viticulturalists in fine tuning vineyard management and developing new varieties through breeding programs that exploit the natural variation inherent in *Vitis*. Improvements in these areas can only help maximize Canada's flourishing potential for consistently producing and marketing world-class wines."

**A SUMMARY OF THE OUTCOMES FROM THIS COMPLETED PROJECT IS CURRENTLY BEING CONSTRUCTED. PLEASE CHECK THIS SITE AGAIN FOR AN UPDATE ON PROJECT RESULTS.**