

Saccharomyces and non-Saccharomyces yeasts in Chilean winemaking

Dr. Angelica Ganga

**Laboratory of Biotechnology and Applied Microbiology of the
*Universidad de Santiago de Chile***

The general goal of our laboratory is the study of native yeasts isolated in different areas of Chile and to determine their potential for the local wine industry. As the first approach in collaboration with the industry, we isolated yeasts from young wines. We selected a yeast strain for the production of the artisanal wine named Pajarete. In our research on non-*Saccharomyces* yeast, we looked for enzymatic activities of industrial interest, and we isolated and selected a yeast belonging to *Metschnikowia pulcherrima*, which produces high concentration of thiols, thus providing fruity aromas to wines. This yeast has now been commercialized by Lallemant Inc. Also we carried out studies about spoilage yeast in wine, such as *Brettanomyces bruxellensis*, which produces off-flavours (phenolic aromas) in wine. For this, we studied the biosynthetic pathway of this "aroma". We studied the genetics of the diversity between isolated strains in this species.