ABSTRACT

The impact of yeasts on food production, quality and safety is closely linked with their ecology and biological activities. Recently, as a consequence of the relationship between diet and health, yeasts are becoming relevant as new probiotics or for the production of bioactive compounds. In dairy products, yeasts play a key role in proteolysis, lipolysis and lactose fermentation during cheese ripening, promoting the development of sensory properties, particularly aroma. This thesis focuses on the yeast diversity in artisanal cheeses produced in the Natural Park Serra d'Espadà (Castelló) from ewes' and goats' raw milk. Different molecular techniques have been employed in order to characterize yeast isolates. Moreover, the succession of species along the cheese ripening process was studied. The intraspecific variability of the most abundant identified species *Debaryomyces hansenii* and *Kluyveromyces lactis* was also assessed. Additionally, the potential of *Kluyveromyces marxianus* and *K. lactis* β-galactosidases to synthetize prebiotic oligosaccharides from lactose and lactulose was tested. Finally, *Kluyveromyces* and *Debaryomyces* isolates were investigated for the production of cheese aromatic compounds.