INDEX

INTRODUCTION	1
JUSTIFICATION & OBJECTIVES	83
CHAPTER 1	91
Nitrogen requirements of commercial wine yeast strains during fermentation synthetic grape must	of a
CHAPTER 2	125
Genetic basis for wine yeast variations in nitrogen source utilization	
CHAPTER 3 Biomarkers for detecting nitrogen deficiency during alcoholic fermentation in different commercial wine yeast strains	163
CHAPTER 4	197
Impact of nitrogen sources on growth, consumption rate and nitrogen catabolic repression in different yeast strains during wine fermentations	ite
CHAPTER 5	235
Nitrogen needs of a commercial wine yeast strain in the stationary phase: effective of sugar concentration and impact on aroma production	ect
CHAPTER 6	267
Arginine addition in the stationary phase increases fermentation activity and aroma synthesis in different wine strains	
GENERAL DISCUSSION	295
CONCLUSIONS	309
ANNEX 1	315
ANNEX 2	345
ANNEX 3	355
ANNEX 4	369