

# Table of content

Abstract .....1

Résumé..... 2

Introduction ..... 3

    Macroevolutionary biology and comparative methods .....5

    Comparative phylogenetic methods .....5

    Intra- and interspecific variation: micro- and macroevolutionary approaches ..... 8

    The role of intraspecific variation in comparative methods..... 8

    Ecological niche with relation to intraspecific variation .....10

    Study group and data collection ..... 11

    Objectives of the thesis .....15

Chapter 1 .....

    Abstract..... 26

    Introduction.....27

    Materials and Methods ..... 29

    Results.....35

    Discussion ..... 42

Chapter 2 .....

    Abstract.....56

    Introduction.....57

    Methods ..... 60

    Results.....65

    Discussion ..... 71

Chapter 3.....

Abstract..... 90

Introduction.....91

Methods ..... 94

Results..... 101

Discussion ..... 110

Chapter 4.....

Abstract.....128

Introduction..... 129

Simulation Settings.....130

Results.....132

Discussion and Guidelines.....136

Chapter 5.....

Abstract.....146

Introduction..... 147

Methods and Data.....150

Results..... 161

Discussion ..... 167

Annex 1.....

Abstract.....184

Introduction.....185

Methods .....187

Results.....192

Discussion .....194

Synthesis .....  
    Evolution of intraspecific variation: empirical results ..... 206  
    Evolution of intraspecific variation: methodological results..... 208  
    Conclusions and perspectives ..... 209  
Thanks .....215