

## Table of Contents

Summary .....	I
Zusammenfassung .....	III
Table of Contents .....	V
Figures .....	VII
Tables .....	X
Abbreviations .....	XI
1 General Introduction.....	1
1.1 Scope of the Thesis.....	1
1.2 Objectives .....	2
2 Literature Analysis .....	4
2.1 Process of Ensiling .....	4
2.2 Quality Parameters of Silage .....	7
2.3 Aerobic Stability and Deterioration.....	8
2.4 Influencing Factors on Silage Quality .....	10
2.4.1 Physical Influencing Factors.....	10
2.4.1.1 Dry Matter Content .....	10
2.4.1.2 Chopping Length.....	11
2.4.1.3 Density .....	12
2.4.2 Biological Influencing Factors.....	14
2.4.2.1 Microflora of Ensiling.....	14
2.4.2.2 Spoilage Organisms.....	16
2.4.3 Chemical Influencing Factors .....	18
2.4.3.1 Buffering Capacity .....	18
2.4.3.2 Water-Soluble Carbohydrates .....	19
3 Published Trials.....	26

## Table of contents

---

3.1 Paper I.....	26
3.2 Paper II.....	38
3.3 Paper III.....	54
3.4 Paper IV.....	72
4 General Discussion and Conclusions.....	88
Conference Contributions.....	98
Publications.....	99
Danksagung.....	100