



Table of contents

Thesis

Statement

Acknowledgement

Abstract

Content

1. Introduction	3
1.1. Carbon cycle on the Earth.....	3
1.2. Wood biomass	3
1.3. Wood extractives	3
1.4. Wood rotting fungi.....	4
1.5. Utilization of wood biomass	4
1.6. Statement of the problem.....	5
1.7. Objective of the study	5
2. Methodology.....	6
2.1. Materials.....	6
2.1.1. Wood species used.....	6
2.1.2. Fungal species used	6
2.2. Methods.....	6
2.2.1. Wood block samples preparation	6
2.2.2. Fungal species preparation.....	7
2.2.3. Experimental setting	7
2.2.4. Wood block combinations.....	7
2.2.5. Fungal growth evaluation	8



2.2.6. Mass loss measurement	8
2.2.7. FTIR analysis	9
3. Results and Discussion	10
3.1. Hyphae growth	10
3.2. Mass loss	12
3.2.1. Mass loss of wood block samples	12
3.2.2. The relationship between fungal growth and mass loss.....	13
3.3. FTIR analysis	16
3.3.1. FTIR spectra.....	16
3.3.2. PCA analysis	19
4. Conclusion	22
5. References	23