

# Contents

1. Introduction .....	4
2. Material and methods .....	5
2.1. Study area .....	5
2.2. Studied stands .....	6
2.3. Methods .....	6
3. Results .....	8
3.1. Underground biomass of unmowed stands .....	8
3.1.1. Live and dead underground biomass .....	8
3.1.2. Vertical distribution of underground biomass .....	10
3.1.3. Carbohydrate content in underground biomass .....	10
3.2. Changes in underground biomass under impact of mowing .....	16
3.2.1. Live and dead underground biomass .....	16
3.2.2. Vertical distribution of underground biomass .....	24
3.2.3. Changes in carbohydrate content in underground biomass .....	26
3.2.4. Resistance to disturbance and production stability .....	29
4. Discussion .....	32
4.1. Underground biomass of unmowed stands .....	32
4.1.1. Live, dead and total underground biomass .....	32
4.1.2. Vertical distribution of underground biomass .....	42
4.2. Impact of mowing on underground biomass .....	42
4.2.1. Changes in species composition .....	42
4.2.2. Live and dead underground biomass .....	42
4.2.3. Vertical distribution of underground biomass .....	43
4.2.4. Carbohydrate content in underground biomass .....	44
4.2.5. Resistance to disturbance and production stability .....	45
5. Summary .....	46
Acknowledgements .....	47
6. Literature .....	49