

Contents

Introduction	2
Material and methods	3
Plant cultivation and growth analysis	3
Experiments in fully controlled conditions	3
Pot experiments in garden conditions	4
Analysis of plants in natural habitats	4
Gas exchange measurements	5
Chemical analysis and statistical evaluation	5
Results	6
Interaction between nitrogen form in substrate and light availability	6
Responses to low irradiance - outdoor experiments	16
Responses to low nitrogen availability in substrate	24
Comparative studies in natural habitats	26
Discussion	29
Responses to low irradiance	29
Responses to nitrogen availability	30
Responses to nitrogen form in substrate	31
Summary	32
Literature	33