

Contents

Part 1.....	1
1. Introduction.....	1
1.1. General Aspects.....	8
1.2. Biological Diversity of the Genus <i>Botrytis</i>	16
1.3. Taxonomic Characteristics of the Genus <i>Botrytis</i>	35
1.4. Morphological Features of the Genus <i>Botrytis</i>	38
1.5. Molecular Aspects of the Genus <i>Botrytis</i>	50
References.....	62
Part 2.....	85
2. Life Cycle of <i>Botrytis cinerea</i>	85
2.1. Anamorph Stage.....	87
2.2. Teleomorph Stage.....	92
2.3. Epidemiology.....	95
2.4. Impact of Ampelotechnical Measures in the Grapevine Protection....	98
References.....	107
Part 3.....	117
3. Pathogenesis of <i>Botrytis cinerea</i>	117
3.1. Abiotic Disorders—Reasons for Disease Development.....	126
3.2. Virulence Factors of <i>Botrytis cinerea</i>	130
3.3. Cutinase.....	134
3.4. Polygalacturonase.....	135

3.5. Laccase.....	139
3.6. β -Glucosidase.....	141
References.....	143
Part 4.....	151
4. Host Resistance Factors.....	151
4.1. Antifungal Compounds.....	161
4.1.1. Stilbenoid Activities in Grapevine.....	166
4.1.2. Resveratrol.....	169
4.1.3. Pterostilbene.....	172
References.....	174
Part 5.....	183
5. Mode of Action of Botricides and Types of Molecular Resistance in <i>Botrytis spp</i>	183
5.1. Multisite Botryticides.....	184
5.2. Unisite Fungicides.....	186
5.2.1. Cytoskeleton Inhibitors.....	186
5.2.2. Fungicides Affecting Signal-Transduction (Osmoregulation).....	189
5.2.3. Inhibitors of Amino-Acid Biosynthesis.....	194
5.2.4. Ergosterol Biosynthesis Inhibitors.....	198
5.2.5. Fungicides Affecting Fungal Respiration.....	203
References.....	207
Part 6.....	217

6. Resistance of <i>Botrytis spp</i> to Fungicides.....	217
6.1. Cross-Resistance to Fungicides.....	217
6.2. Detoxification.....	221
6.3. Fitness Cost of <i>Botrytis spp</i> to Fungicide Resistance.....	228
6.4. Anti-Resistance Strategies at <i>Botrytis spp</i>	230
References.....	232