

---

# Contents

|                                                                                    |     |
|------------------------------------------------------------------------------------|-----|
| About this Book . . . . .                                                          | VII |
| <br>                                                                               |     |
| 1 Introduction to the Genus <i>Coryphantha</i> . . . . .                           | 1   |
| <br>                                                                               |     |
| 2 Ecology of <i>Coryphantha</i> spp. . . . .                                       | 3   |
| 2.1 Geographical Distribution . . . . .                                            | 3   |
| 2.2 Climate . . . . .                                                              | 3   |
| 2.3 Geology . . . . .                                                              | 4   |
| 2.4 Habitats . . . . .                                                             | 4   |
| 2.5 Conservational Status . . . . .                                                | 5   |
| <br>                                                                               |     |
| 3 Morphology of <i>Coryphantha</i> . . . . .                                       | 7   |
| 3.1 Body . . . . .                                                                 | 7   |
| 3.2 Tubercles . . . . .                                                            | 9   |
| 3.3 Areoles . . . . .                                                              | 12  |
| 3.4 Spines . . . . .                                                               | 13  |
| 3.5 Flowers . . . . .                                                              | 15  |
| 3.6 Fruits . . . . .                                                               | 17  |
| 3.7 Seeds . . . . .                                                                | 17  |
| <br>                                                                               |     |
| 4 History of the Genus <i>Coryphantha</i> . . . . .                                | 21  |
| 4.1 Introduction . . . . .                                                         | 21  |
| 4.2 Chronology . . . . .                                                           | 21  |
| 4.3 The Generic Name <i>Coryphantha</i> and the Type Species . . . . .             | 26  |
| <br>                                                                               |     |
| 5 Position and Delimitation of the Genus <i>Coryphantha</i> . . . . .              | 29  |
| 5.1 Previous, Traditional Interpretation of the Genus <i>Coryphantha</i> . . . . . | 29  |
| 5.2 New Interpretation of the Genus <i>Coryphantha</i> . . . . .                   | 30  |
| 5.3 Systematic Overview of the Genus <i>Coryphantha</i> . . . . .                  | 37  |
| <br>                                                                               |     |
| 6 Key to the Genus <i>Coryphantha</i> . . . . .                                    | 39  |

---

|          |                                                                   |               |
|----------|-------------------------------------------------------------------|---------------|
| <b>7</b> | <b>The Genus <i>Coryphantha</i> - Descriptions of the Species</b> | <b>43</b>     |
|          | <b>Colour Plates</b>                                              | <b>73–144</b> |
| <b>8</b> | <b><i>Coryphantha</i> spp. in Cultivation</b>                     | <b>173</b>    |
| 8.1      | Optimum Cultivation Conditions                                    | 173           |
| 8.2      | Soils and Pots                                                    | 173           |
| 8.3      | Watering and Fertilization                                        | 174           |
| 8.4      | Pests and Illnesses                                               | 174           |
| 8.5      | Sowing and Propagation                                            | 175           |
|          | <b>References</b>                                                 | <b>177</b>    |
|          | <b>Appendix</b>                                                   | <b>185</b>    |
|          | Comparison Tables                                                 | 185           |
|          | Synonyms and Valid Names                                          | 188           |
|          | Illustration Credits                                              | 198           |
|          | <b>Index</b>                                                      | <b>199</b>    |