

# TABLE OF CONTENTS

---

|                 |     |
|-----------------|-----|
| List of Figures | xi  |
| Classification  | xiv |
| Abbreviations   | xix |
| Postlude        | xx  |

## INTRODUCTION TO PALM STRUCTURE (Part 1) 1

|           |                                                              |    |
|-----------|--------------------------------------------------------------|----|
| CHAPTER 1 | Anatomical methods                                           | 3  |
| CHAPTER 2 | Palm construction and classification                         | 12 |
| CHAPTER 3 | Leaf lamina                                                  | 17 |
| CHAPTER 4 | Leaf axis                                                    | 32 |
| CHAPTER 5 | Stem anatomy                                                 | 39 |
| CHAPTER 6 | Root                                                         | 50 |
| CHAPTER 7 | Vascular tissues and cell inclusions                         | 57 |
| CHAPTER 8 | Spines                                                       | 65 |
| CHAPTER 9 | Classification, phylogeny, and anatomical evolution of palms | 69 |

## SYSTEMATIC ANATOMY OF PALMS (Part 2) 79

(Arranged by subfamily and tribe)

### Subfamily Calamoideae 81

|               |     |
|---------------|-----|
| Introduction  | 81  |
| Eugeissoneae  | 88  |
| Lepidocaryeae | 90  |
| Calameae      | 98  |
| Salaccinae    | 100 |

### Subfamily Nypoideae 112

|                   |     |
|-------------------|-----|
| Introduction      | 112 |
| Leaf              | 112 |
| Stem              | 116 |
| Root              | 116 |
| Vascular elements | 116 |
| Cell inclusions   | 116 |

### Subfamily Coryphoideae 117

|                  |     |
|------------------|-----|
| Introduction     | 117 |
| Sabaleae         | 127 |
| Cryosophileae    | 129 |
| Phoeniceae       | 138 |
| Trachycarpeae    | 140 |
| Chuniophoeniceae | 153 |
| Caryoteae        | 157 |
| Corypheae        | 160 |
| Borasseae        | 161 |

**Subfamily Ceroxyloideae 170**

- Introduction 170
- Cyclospatheae 173
- Ceroxyleae 175
- Phytelepheae 180

**Subfamily Arecoideae 185**

- Introduction 185
- Iriarteeae 190
- Chamaedoreae 192
- Podococceae 196
- Oranieae 198
- Sclerospermeae 200
- Roystoneae 201
- Reinhardtiae 201
- Cocoseae 203
- Manicarieae 213
- Euterpeae 214
- Geonomateae 216
- Leopoldinieae 219
- Pelagodoxeae 221
- Areceae 223

- Bibliography 241
- Index to scientific names 247
- Index to subject 249