

# Contents

List of Figures .....	xix
Preface.....	xxvii
Author .....	xxix

## Chapter 1

Theoretical Background.....	1
Evolutionary Biogeography.....	1
Steps of Evolutionary Biogeography.....	2
Biogeographic Regionalization.....	7
Nomenclatural Conventions.....	8
Format Used in the Book.....	8

## Chapter 2

Historical Background.....	9
Biogeographic Placement of the Neotropical Region.....	11
Early Regionalization of the Neotropical Region.....	12
Modern Biogeographic Regionalization.....	24
Biogeographic Regionalization in the Twenty-First Century.....	36

## Chapter 3

The Neotropical Region.....	41
Neotropical Region.....	41
Endemic and Characteristic Taxa.....	43
Biotic Relationships.....	44
Regionalization.....	47

## Chapter 4

The Mexican Transition Zone.....	49
Mexican Transition Zone.....	49
Endemic and Characteristic Taxa.....	51
Biotic Relationships.....	54
Regionalization.....	59
Cenocrons.....	59
Sierra Madre Occidental Province.....	61
Definition.....	63
Endemic and Characteristic Taxa.....	63
Vegetation.....	64
Biotic Relationships.....	64
Regionalization.....	64
Cenocrons.....	65

Sierra Madre Oriental Province .....	65
Definition .....	66
Endemic and Characteristic Taxa.....	66
Vegetation.....	67
Biotic Relationships.....	68
Regionalization.....	68
Trans-Mexican Volcanic Belt Province .....	69
Definition.....	70
Endemic and Characteristic Taxa.....	71
Vegetation.....	71
Biotic Relationships.....	71
Regionalization.....	72
Cenocrons.....	73
Sierra Madre del Sur Province.....	74
Definition.....	74
Endemic and Characteristic Taxa.....	75
Vegetation.....	75
Biotic Relationships.....	75
Regionalization.....	76
Chiapas Highlands Province.....	77
Definition.....	77
Endemic and Characteristic Taxa.....	78
Vegetation.....	78
Biotic Relationships.....	78
Regionalization.....	79
 Chapter 5	
The Antillean Subregion.....	81
Antillean Subregion .....	81
Endemic and Characteristic Taxa.....	82
Biotic Relationships.....	83
Regionalization.....	92
Cenocrons.....	92
Bahama Province .....	93
Definition.....	93
Endemic and Characteristic Taxa.....	94
Vegetation.....	94
Biotic Relationships.....	94
Regionalization.....	94
Cuban Province.....	94
Definition.....	95
Endemic and Characteristic Taxa.....	95
Vegetation.....	96
Biotic Relationships.....	96

Regionalization.....	96
Cenocrons.....	98
Cayman Islands Province.....	98
Definition.....	98
Endemic and Characteristic Taxa.....	98
Vegetation.....	98
Biotic Relationships.....	98
Regionalization.....	99
Jamaica Province .....	99
Definition.....	99
Endemic and Characteristic Taxa.....	99
Vegetation.....	99
Biotic Relationships.....	99
Regionalization.....	100
Hispaniola Province .....	100
Definition.....	100
Endemic and Characteristic Taxa.....	100
Vegetation.....	101
Biotic Relationships.....	101
Regionalization.....	102
Puerto Rico Province .....	102
Definition.....	102
Endemic and Characteristic Taxa.....	102
Vegetation.....	102
Biotic Relationships.....	103
Regionalization.....	103
Lesser Antilles Province .....	103
Definition.....	103
Endemic and Characteristic Taxa.....	104
Vegetation.....	104
Biotic Relationships.....	104
Chapter 6	
The Brazilian Subregion .....	105
Brazilian Subregion.....	106
Endemic and Characteristic Taxa.....	107
Biotic Relationships.....	107
Regionalization.....	109
Boreal Brazilian Dominion.....	109
Definition.....	111
Endemic and Characteristic Taxa.....	111
Biotic Relationships.....	111
Regionalization.....	112

Napo Province.....	112
Definition.....	113
Endemic and Characteristic Taxa.....	113
Vegetation.....	113
Biotic Relationships.....	113
Regionalization.....	114
Imerí Province.....	114
Definition.....	114
Endemic and Characteristic Taxa.....	114
Vegetation.....	115
Biotic Relationships.....	115
Regionalization.....	115
Pantepui Province .....	115
Definition.....	116
Endemic and Characteristic Taxa.....	116
Vegetation.....	118
Biotic Relationships.....	118
Cenocrons.....	119
Guianan Lowlands Province.....	121
Definition.....	121
Endemic and Characteristic Taxa.....	121
Vegetation.....	122
Biotic Relationships.....	122
Roraima Province.....	122
Definition.....	123
Endemic and Characteristic Taxa.....	123
Vegetation.....	123
Biotic Relationships.....	123
Pará Province .....	123
Definition.....	124
Endemic and Characteristic Taxa.....	124
Vegetation.....	125
Biotic Relationships.....	125
South Brazilian Dominion .....	125
Definition.....	126
Endemic and Characteristic Taxa.....	126
Regionalization.....	126
Ucayali Province .....	126
Definition.....	127
Endemic and Characteristic Taxa.....	128
Vegetation.....	128
Biotic Relationships.....	128
Regionalization.....	128

Madeira Province .....	129
Definition .....	129
Endemic and Characteristic Taxa .....	129
Vegetation .....	130
Biotic Relationships .....	130
Rondônia Province .....	130
Definition .....	131
Endemic and Characteristic Taxa .....	131
Vegetation .....	131
Biotic Relationships .....	132
Regionalization .....	132
Yungas Province .....	132
Definition .....	133
Endemic and Characteristic Taxa .....	133
Vegetation .....	134
Biotic Relationships .....	134
Regionalization .....	134
Pacific Dominion .....	135
Definition .....	135
Endemic and Characteristic Taxa .....	135
Biotic Relationships .....	136
Regionalization .....	136
Guatuso–Talamanca Province .....	136
Definition .....	138
Endemic and Characteristic Taxa .....	138
Vegetation .....	138
Biotic Relationships .....	139
Puntarenas–Chiriquí Province .....	139
Definition .....	139
Endemic and Characteristic Taxa .....	140
Vegetation .....	140
Biotic Relationships .....	140
Chocó–Darién Province .....	140
Definition .....	141
Endemic and Characteristic Taxa .....	141
Vegetation .....	142
Biotic Relationships .....	143
Regionalization .....	143
Guajira Province .....	143
Definition .....	143
Endemic and Characteristic Taxa .....	144
Vegetation .....	144
Biotic Relationships .....	144
Regionalization .....	145

Venezuelan Province.....	145
Definition.....	145
Endemic and Characteristic Taxa.....	146
Vegetation.....	146
Biotic Relationships.....	146
Trinidad Province.....	146
Definition.....	147
Endemic and Characteristic Taxa.....	147
Vegetation.....	147
Biotic Relationships.....	147
Magdalena Province.....	147
Definition.....	148
Endemic and Characteristic Taxa.....	148
Vegetation.....	149
Biotic Relationships.....	149
Regionalization.....	149
Sabana Province.....	149
Definition.....	149
Endemic and Characteristic Taxa.....	150
Vegetation.....	150
Biotic Relationships.....	150
Regionalization.....	151
Cauca Province.....	151
Definition.....	151
Endemic and Characteristic Taxa.....	152
Vegetation.....	152
Biotic Relationships.....	152
Galapagos Islands Province.....	152
Definition.....	153
Endemic and Characteristic Taxa.....	154
Vegetation.....	154
Biotic Relationships.....	155
Western Ecuador Province.....	156
Definition.....	156
Endemic and Characteristic Taxa.....	157
Vegetation.....	157
Ecuadorian Province.....	157
Definition.....	158
Endemic and Characteristic Taxa.....	158
Vegetation.....	158
Mesoamerican Dominion.....	158
Definition.....	159
Endemic and Characteristic Taxa.....	162
Biotic Relationships.....	162

Regionalization.....	163
Cenocrons.....	164
Pacific Lowlands Province.....	166
Definition.....	167
Endemic and Characteristic Taxa.....	167
Vegetation.....	167
Biotic Relationships.....	167
Regionalization.....	169
Balsas Basin Province.....	170
Definition.....	171
Endemic and Characteristic Taxa.....	171
Vegetation.....	171
Biotic Relationships.....	171
Regionalization.....	173
Veracruzán Province.....	173
Definition.....	174
Endemic and Characteristic Taxa.....	174
Vegetation.....	174
Biotic Relationships.....	175
Regionalization.....	175
Yucatán Peninsula Province.....	175
Definition.....	176
Endemic and Characteristic Taxa.....	176
Vegetation.....	176
Biotic Relationships.....	178
Regionalization.....	178
Mosquito Province.....	179
Definition.....	179
Endemic and Characteristic Taxa.....	180
Vegetation.....	180
Biotic Relationships.....	180
Regionalization.....	180
Chapter 7	
The Chacoan Subregion.....	181
Chacoan Subregion.....	181
Endemic and Characteristic Taxa.....	182
Biotic Relationships.....	182
Regionalization.....	182
Southeastern Amazonian Dominion.....	182
Definition.....	183
Endemic and Characteristic Taxa.....	183
Regionalization.....	184
Biotic Relationships.....	184

Xingu–Tapajós Province .....	184
Definition .....	184
Endemic and Characteristic Taxa.....	184
Vegetation .....	185
Biotic Relationships.....	185
Chacoan Dominion .....	185
Definition .....	185
Endemic and Characteristic Taxa.....	185
Biotic Relationships.....	186
Regionalization.....	186
Caatinga Province .....	186
Definition .....	188
Endemic and Characteristic Taxa.....	189
Vegetation .....	189
Biotic Relationships.....	190
Regionalization.....	190
Cerrado Province .....	190
Definition .....	192
Endemic and Characteristic Taxa.....	192
Vegetation .....	192
Biotic Relationships.....	193
Regionalization.....	194
Chaco Province .....	195
Definition .....	196
Endemic and Characteristic Taxa.....	196
Vegetation .....	196
Biotic Relationships.....	197
Regionalization.....	197
Pampean Province.....	199
Definition .....	200
Endemic and Characteristic Taxa.....	200
Vegetation .....	200
Biotic Relationships.....	201
Regionalization.....	201
Paraná Dominion .....	203
Definition .....	203
Endemic or Characteristic Taxa .....	204
Biotic Relationships.....	205
Regionalization.....	205
Atlantic Province.....	205
Definition .....	206
Endemic and Characteristic Taxa.....	206
Vegetation .....	207
Biotic Relationships.....	208
Regionalization.....	208

Paraná Province .....	208
Definition.....	209
Endemic and Characteristic Taxa.....	209
Vegetation.....	209
Biotic Relationships.....	210
Regionalization.....	210
<i>Araucaria</i> Forest Province.....	211
Definition.....	211
Endemic and Characteristic Taxa.....	212
Vegetation.....	212
Chapter 8	
The South American Transition Zone .....	213
South American Transition Zone.....	213
Endemic and Characteristic Taxa.....	214
Biotic Relationships.....	215
Regionalization.....	215
Cenocrons.....	217
Páramo Province .....	217
Definition.....	218
Endemic and Characteristic Taxa.....	218
Vegetation.....	218
Biotic Relationships.....	221
Regionalization.....	221
Cenocrons.....	222
Desert Province.....	222
Definition.....	223
Endemic and Characteristic Taxa.....	223
Vegetation.....	223
Biotic Relationships.....	224
Regionalization.....	224
Cenocrons.....	224
Puna Province .....	225
Definition.....	226
Endemic and Characteristic Taxa.....	226
Vegetation.....	227
Biotic Relationships.....	227
Regionalization.....	227
Atacama Province .....	227
Definition.....	228
Endemic and Characteristic Taxa.....	228
Vegetation.....	228
Biotic Relationships.....	230

Regionalization.....	230
Cenocrons.....	230
Cuyan High Andean Province .....	230
Definition.....	231
Endemic and Characteristic Taxa.....	231
Vegetation.....	231
Biotic Relationships.....	232
Monte Province .....	232
Definition.....	233
Endemic and Characteristic Taxa.....	233
Vegetation.....	234
Biotic Relationships.....	234
Regionalization.....	234
Cenocrons.....	235
Epilogue .....	237
References.....	239
Index .....	277