

Table of Contents

Introduction.....	1
1. Ecological importance and diversification of termites.....	4
2. Isoptera and the emergence of eusociality	7
3. Developmental pathways and caste differentiation in termites.....	8
4. Multilayered facets of mating systems.....	11
4.1 Colony foundation	12
4.2 Colony genetic structure	14
4.3 Modes of reproduction.....	15
4.3.1 Copulation and fertilization	16
4.3.2 Mechanisms of parthenogenesis	17
4.3.3 Parthenogenesis in termites	20
4.3.4 Asexual Queen Succession.....	21
4.4 Reproductive output of the colony.....	22
4.4.1 Sex ratio in eusocial hymenopterans	23
4.4.2 Sex ratio in termites	24
5. Objectives.....	28
Part I: Modalities of reproduction of the neotropical termite <i>Cavitermes tuberosus</i>	31
Chapter 1: Discovery and characterization of the AQS syndrome in <i>C. tuberosus</i>	33
Chapter 2: Ontogenetic origin of neotenic queens in <i>C. tuberosus</i>	51
Chapter 3: Consequences of AQS on the dispersers' sex ratio in <i>C. tuberosus</i>	65
Part II: Ecology and symbiosis of the neotropical termite <i>Cavitermes tuberosus</i>	85
Chapter 4: Symbiosis between <i>Wolbachia</i> and a termite.....	87
Chapter 5: Feeding strategy of an inquiline arboreal termite.....	113
Part III: Reproductive strategies in neotropical termites of the <i>Termes</i> group	159
Chapter 6: Description of a new genus and species of neotropical termite	161
Chapter 7: Reproductive systems in neotropical termites of the <i>Termes</i> group.....	179
Discussion and Perspectives	225
1. Facultative asexual reproduction and its ultimate consequences in termites.....	226
1.1 Asexual queen succession and sex ratio	229
1.2 Parthenogenesis and the inquiline lifestyle	235
2. Ecology and symbiosis in inquiline humivorous termites	237
2.1 Symbiosis with <i>Wolbachia</i>	237
2.2 Obligatory and facultative inquilinism.....	238
References	241