1. Record Nr. UNINA9910812471303321 Autore **Hughes David P** Titolo Host Manipulation by Parasites Oxford,: OUP Oxford, 2012 Pubbl/distr/stampa **ISBN** 0-19-163165-5 1-283-80444-1 0-19-163164-7 Edizione [1st ed.] Descrizione fisica 1 online resource (247 p.) **BrodeurJacques** Altri autori (Persone) **ThomasFrederic** 577.857 Disciplina Soggetti Host-parasite relationships Host-Pathogen Interactions Zoology Health & Biological Sciences **Animal Behavior** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di contenuto Cover; Contents; List of contributors; Foreword; 1 A history of parasites and hosts, science and fashion; 1.1 Introduction; 1.2 The days before cool; 1.3 Becoming cool; 1.4 Beyond manipulation; 1.5 Conclusion; Afterword; 2 Evolutionary routes leading to host manipulation by parasites; 2.1 Introduction; 2.2 The origins of host manipulation; 2.2.1 Manipulation sensu stricto; 2.2.2 Complex parasitic cycles: the cause or the consequence of parasite manipulation?; 2.2.3 Host-driven scenarios of manipulation; 2.2.4 Exaptation?; 2.3 The evolution of manipulation after its emergence 2.3.1 Genetically based variation in phenotypic alterations 2.3.2 Other sources of variation; 2.4 Multidimensional manipulations: evidence of evolution or a syndrome?; 2.4.1 Why do multidimensional manipulations evolve?; 2.4.2 Simultaneous versus sequential multidimensional manipulations; 2.4.3 How did multidimensional manipulations evolve?; 2.4.4 Proximate aspects of multidimensionality; 2.5 Concluding remarks; Afterword; 3 The strings of the puppet

master: how parasites change host behavior; 3.1 Introduction; 3.2 How

do parasites alter host behavior? Vertebrate examples 3.2.1 Toxoplasma gondii3.2.2 Neuroviruses; 3.3 Invertebrate examples; 3.3.1 Gammarids-don't go into the light!; 3.3.2 Suicidal crickets: 3.4 How might parasites manipulate host behavior?: 3.5 How can parasitic infections produce specific changes in host behavior without neuroanatomical specificity?; Afterword; 4 Parasites discover behavioral ecology; how to manage one's host in a complex world: 4.1 Introduction; 4.2 The problem; 4.2.1 A healthy caterpillar; 4.2.2 A parasitized caterpillar; 4.3 Discussion; Afterword; 5 Manipulation of plant phenotypes by insects and insect-borne pathogens 5.1 Introduction 5.2 Plant manipulation by insect herbivores; 5.2.1 Gallinducing insects; 5.2.2 Structural modification of host plants; 5.2.3 Green islands; 5.2.4 Manipulation of phytohormones; 5.3 Plant manipulation by insect-borne pathogens; 5.3.1 Manipulation of plantpollinator interactions by fungal parasites; 5.3.2 Pathogen manipulation of plant-herbivore interactions; 5.4 Conclusion; Afterword; 6 Visual trickery in avian brood parasites; 6.1 Introduction; 6.2 Accessing host nests; 6.3 The egg stage; 6.4 The nestling stage; 6.5 Visual trickery to elicit parental care

6.6 Mimicry in generalist versus specialist parasites6.7 Conclusions; Afterword; 7 Endosymbiotic microbes as adaptive manipulators of arthropod behavior and natural driving sources of host speciation; 7.1 Introduction; 7.2 Wolbachia: the multidimensional manipulator of arthropods; 7.2.1 Reproductive parasitism triggered by Wolbachia; 7.2.2 Wolbachia's repertoire of inducing non-reproductive, adaptive phenotypes; 7.3 Symbiont-directed adaptive manipulation of host sexual behavior; 7.3.1 Feminization-the transformation of genetic males into functional females

7.3.2 Manipulating sexual mating behavior

Sommario/riassunto

Parasites that manipulate the behaviour of their hosts represent striking examples of adaptation by natural selection. This field of study is now moving beyond its descriptive phase and into more exciting areas where the processes and patterns of such dramatic adaptations can be better understood. This innovative text provides an up-to-date, authoritative, and challenging review of host manipulation by parasites that assesses the current state of developments in the field and laysout a framework for future research. It also promotes a greater integration of behavioral ecology with studies of h