

1. Record Nr.	UNINA9910786204003321
Autore	Hughes David P
Titolo	Host Manipulation by Parasites [[electronic resource]]
Pubbl/distr/stampa	Oxford, : OUP Oxford, 2012
ISBN	0-19-163165-5 1-283-80444-1 0-19-163164-7
Descrizione fisica	1 online resource (247 p.)
Altri autori (Persone)	BrodeurJacques ThomasFrederic
Disciplina	577.857
Soggetti	Host-parasite relationships Host-Pathogen Interactions Zoology Health & Biological Sciences Animal Behavior
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
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 gondii* 3.2.2 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 Gall-inducing 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 plant-pollinator 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 parasites 6.7 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 lays out a framework for future research. It also promotes a greater integration of behavioral ecology with studies of h
