1. Record Nr. UNINA9910818404903321

Titolo	Genotype-by-environment interactions and sexual selection / / edited by John Hunt and David Hosken
Pubbl/distr/stampa	Oxford, England ; ; Chichester, England ; ; Hoboken, New Jersey : , : Wiley Blackwell, , 2014 ©2014
ISBN	1-118-91262-4 1-118-91259-4 1-118-91261-6
Descrizione fisica	1 online resource (373 p.)
Disciplina	591.56/2
Soggetti	Sexual selection in animals Genotype-environment interaction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Cover; Title Page; Copyright; Contents; List of Contributors; Preface; About the Companion Website; Part I Introduction and Theoretical Concepts; Chapter 1 Genotype-by-Environment Interactions and Sexual Selection: Female Choice in a Complex World; 1.1 Introduction; 1.2 Classical female choice; 1.3 The instability of ""good genes"" when male quality is a complex trait; 1.3.1 Additive effects of genes on genotypic value; 1.3.2 Genotype-by-environment interaction; 1.3.3 Gene-by-gene interaction; 1.3.4 Indirect genetic effects sensu quantitative genetics; 1.4 Discussion; Acknowledgments ReferencesChapter 2 GEIs when Information Transfer is Uncertain or Incomplete; 2.1 Introduction; 2.2 Lewontin''s ""very annoying conclusions""; 2.3 Ignorance, uncertainty, and information; 2.4 Information and fitness; 2.5 Bayesian Statistical Decision Theory; 2.6 Discrimination and selection: the signal detection perspective; 2.7 Search, discrimination, and mate choice by female pied flycatchers; 2.8 Optimal search and the marginal value of additional information; 2.9 Biological signaling theory; 2.10 GEIs in condition, signals, and preferences; 2.11 Conclusions; References

Chapter 3 Local Adaptation and the Evolution of Female Choice3.1 Introduction; 3.2 The Jekyll and Hyde nature of GEIs; 3.3 The model; 3.3.1 Overview; 3.3.2 Initialization phase; 3.3.3 Dispersal; 3.3.4 Determination of condition and viability selection; 3.3.5 Breeding; 3.3.6 Mutation; 3.4 Less local adaptation, more female choice!; 3.5 Can we generalize?; 3.6 GEIs often maintain costly choice in a suitably variable world; 3.7 Insights from the model; 3.8 Prospects for empirical work; 3.9 Prospects for theoretical work; 3.10 Conclusions; References
Chapter 4 Genotype-by-Environment Interactions when the Social Environment Contains Genes4.1 Introduction; 4.2 Modeling genotype-by-social environment interactions; 4.2.1 A simple GEI model when the environment is abiotic; 4.2.2 A simple model for gene interactions; 4.2.3 A simple GSEI model; 4.2.4 Summary; 4.3 Measuring genotype by social environment interactions; 4.4 Empirical evidence for genotype by social environment interactions; 4.5 Future directions; Acknowledgments; References; Part II Practical Issues for Measuring GEIs
Chapter 5 Quantifying Genotype-by-Environment Interactions in Laboratory Systems5.1 Introduction; 5.2 Two perspectives on phenotypic plasticity; 5.2.1 The character state approach; 5.2.2 Norm of reaction approach; 5.3 Breeding designs to detect and estimate G x E; 5.3.1 Common garden; 5.3.2 Clones; 5.3.3 Inbred lines; 5.3.4 Isofemale lines; 5.3.5 Conventional breeding designs; 5.3.6 ""Unconventional"" pedigree designs; 5.3.7 Selection experiments; 5.4 Statistical methodologies; 5.4.1 Mixed-model analysis of variance; 5.4.2 Linear mixed effect model; 5.4.3 The animal model
5.4.4 Individually fitted functions

Sommario/riassunto

Sexual selection is recognized as being responsible for some of the most extravagant morphologies and behaviors in the natural world, as well as a driver of some of the most rapid evolution. While Charles Darwin's theory is now a fundamental component of modern evolutionary biology, the impact of genotype-by-environment interactions on sexual selection has thus far received little attention. This book represents the first comprehensive analysis of the role genotype-by-environment interactions play in sexual selection and the potential implications that they have for the evolutionary process.

2. Record Nr. UNINA9910483493503321

Titolo	Advanced Engineering for Processes and Technologies II / / edited by Azman Ismail, Wardiah Mohd Dahalan, Andreas Öchsner
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-67307-3
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (349 pages)
Collana	Advanced Structured Materials, , 1869-8441 ; ; 147
Disciplina	620
Soggetti	Marine engineering Marine Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. The Potential of using Unmanned Aerial Vehicles for Sea Patrol: Case Study at Royal Malaysian Navy, Lumut Base -- 2. A Study on Tool Directions of an Underwater Friction Stir Welded AA5083 Plate Butt Joint -- 3. The Challenges of the Oil Spill Preparedness and Responses -- 4. Ship Crash Prevention Towards Oil Spill Incidents -- 5. Analysis on Wave Generation and Hull Modification for Fishing Vessels.
Sommario/riassunto	This book “Advanced Engineering for Processes and Technologies II” provides a good platform for participating researchers and academicians to share their latest innovation, technology and research findings in the areas of marine engineering technology and applications, sea management as well as engineering education. It offers an opportunity for academicians of the Universiti Kuala Lumpur, Malaysian Institute of Marine Engineering Technology (UniKL MIMET) to exchange ideas and establish a professional network. There are more than 30 papers covering a wide range of topics related to technologies and education including simulation, intellectual discussion, environmental awareness, enhancement of knowledge and skills. The aim of this book focuses more on the numerous technological methods used for the establishment of engineering innovation and productivity through their competitive research findings and the exposure of their relative merits and limitations. The papers shared in this issue will enable other researchers to generate interest and novel ideas that can

lead to the discovery of new engineering knowledge.