

## Updating the Linnaean Heritage: Names as Tools for Thinking about Animals and Plants

ALESSANDRO MINELLI FLS, LUCIO BONATO & GIUSEPPE FUSCO (EDS)

*Department of Biology, University of Padova, Via Ugo Bassi 58B, I 35131 Padova, Italy*

*Email: alessandro.minelli@unipd.it, lucio.bonato@unipd.it, giuseppe.fusco@unipd.it*

### Table of contents

- 4 **Preface**  
ALESSANDRO MINELLI FLS, LUCIO BONATO, GIUSEPPE FUSCO (ITALY)
- 5 **Actual usage of biological nomenclature and its implications for data integrators; a national, regional and global perspective**  
CHARLES HUSSEY (UK), YDE DE JONG (THE NETHERLANDS), DAVID REMSEN (DENMARK)
- 9 **The Linnean foundations of zoological and botanical nomenclature**  
OTTO KRAUS (GERMANY)
- 21 **Zoological vs. botanical nomenclature: a forgotten ‘BioCode’ experiment from the times of the Strickland Code**  
ALESSANDRO MINELLI (ITALY)
- 39 **ZooBank: developing a nomenclatural tool for unifying 250 years of biological information**  
RICHARD L. PYLE (USA) & ELLINOR MICHEL (UK)
- 51 **Phylogenetic hypotheses, taxa and nomina in zoology**  
ALAIN DUBOIS (FRANCE)
- 87 **Anatomical nomenclature: homology, standardization and datasets**  
GREGORY D. EDGECOMBE (UK)
- 96 **Morphological nomenclature, between patterns and processes: segments and segmentation as a paradigmatic case**  
GIUSEPPE FUSCO (ITALY)
- 103 **Plant structure ontology: how should we label plant structures with doubtful or mixed identities?**  
BRUCE K. KIRCHOFF (USA), EVELIN PFEIFER (SWITZERLAND), ROLF RUTISHAUSER (SWITZERLAND)
- 123 **Learning from Linnaeus: towards developing the foundation for a general structure concept for morphology**  
LARS VOGT (GERMANY)
- 153 **Principles for a names-based cyberinfrastructure to serve all of biology**  
DAVID J. PATTERSON (USA), SARAH FAULWETTER (GREECE), ALEXEY SHIPUNOV (USA)