1. Record Nr. UNINA9910824779603321 Biological shape analysis: proceedings of the 2nd International **Titolo** Symposium, Naha, Okinawa, Japan, 7-9 September 2011 / / Pete E Lestrel, editor Hackensack, NJ,: World Scientific, c2013 Pubbl/distr/stampa 981-4518-41-7 **ISBN** [1st ed.] Edizione Descrizione fisica 1 online resource (238 p.) Altri autori (Persone) LestrelPete E Disciplina 578.012 578/.01/2 Soggetti Biology - Classification Entomology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Preface; REFERENCES; Contents; 3.1. Skull and Cranium; 3.2. Vertebral Morphology; 3.3. Mandibular Studies; 3.4. Whole Body Studies; List of Symposium Participants; 1. Agricultural Crop Selection; 1. SEISHI NINOMIYA: Can Machine Vision Substitute for Plant Breeders' Eye? A Case of Whole Crop Shape Selection in Soybean Breeding: INTRODUCTION: MATERIALS AND SHAPE FEATURES: DISCUSSION AND CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; 2. Entomological Studies; 2. K. H. TAKAHASHI: Genetic Architecture of the Developmental Buffering Machinery for Wing Shape in Fruit Flies; INTRODUCTION DISCUSSION AND CONCLUSIONSREFERENCES; 3. N. KUMANO, T. KURIWADA, K. SHIROMOTO AND H. TATSUTA: Effect of Male Genital Spines on Female Remating Propensity in the West Indian Sweet Potato Weevil, Euscepes postfasciatus; INTRODUCTION; MATERIALS AND METHODS; RESULTS; DISCUSSION AND CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; 4. H. TATSUTA, H. IWATA AND K. GOKA: Morphometric Studies on the Variation of Male Lucanid Beetle Mandibles; INTRODUCTION; MATERIALS AND METHODS; RESULTS; DISCUSSION AND CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; 3. Human Morphological Studies

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## Sommario/riassunto

This proceedings volume describes the current state of research dealing with biological shape analysis. The quantitative analysis of the shape of biological organisms represents a challenge that has now seen breakthroughs with new methodologies such as elliptical Fourier analysis, quantitative trait loci analysis (QTLs), thin plate splines, etc. The volume also illustrates the diversity of disciplines that are actively involved in the characterization and analysis of the biological shape. Some of the papers deal with the need to relate the underlying genome responsible for the actual observed