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Nota di contenuto	1.1. Flowers and leaf structures. 1. A new behavioral experiment using computerized shape analysis of actual flowers / Y. Yoshioka. 2. Quantitative evaluation of blade shape of citrus varieties / Z. Zheng, Y. Hirata and Y. Tamura -- 1.2. Agricultural crops. 3. Analysis of rice plant type using P-type Fourier Descriptors and the search for related chromosomal regions / K. Suzuki and Y. Hirata. 4. Quantitative assessment of soybean plant shape during growth based on sequential image analysis / R. Ohsawa and S. Minagawa. 5. Quantitative genetic analyses of crop organ shape based on the principal components of elliptic Fourier Descriptors / H. Iwata. 6. Shape analysis and its potential in varietal identification / S. G. Bhagwat ... [et al.] -- 2.1. Shape of stag beetles. 7. Morphometric studies of male lucanid beetle mandibles : shape variation between hybrid subspecies / H. Tatsuta, H. Iwata and K. Goka -- 3.1. In a forensic context. 8. The use of clavicle boundary outline to identify skeletal remains of US personnel recovered from past conflicts : results of initial tests / C. N. Stephen, P. D. Emanovsky and A. J. Tyrrell. 9. Three dimensional facial shape archetypes for identification and diagnosis / C. D. L. Thomas ... [et al.] -- 3.2. Skull and cranium. 10. Dissecting the genetic architecture of craniofacial shape. R. J. Sherwood and K. P. McNulty. 11. Craniofacial integrity : co-variation between facial flatness and craniofacial shape in

humans from Lapps (Saami) and Japanese / O. Kondo, M. Nakayama and P. Pirttiniemi. 12. Computational shape analysis : based on a Fourier-wavelet representation of the fossil human cranial vault / P. E. Lestrel ... [et al.] -- 3.3. Shape of the eye orbits. 13. Variation of the orbital rim using elliptic Fourier analysis / P. Urbanova. 14. The use of elliptical Fourier analysis on orbit shape in human skeletal remains / T. Gore ... [et al.] -- 3.4. Shape of long bones. 15. Visualization and quantitative analysis of human femoral diaphysis by means of morphometric mapping / N. Morimoto, M. S. Ponce de Leon and C. P. E. Zollikofer -- 4. Geometric models of shape. 16. The geometry of universal natural shapes / J. Gielis.

Sommario/riassunto

The Proceedings describe 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), chromosome segment substitution lines (CSSLs), thin plate splines, etc. The Proceedings also illustrate the diversity of disciplines that are actively involved in the characterization and analysis of biological shape. Moreover, many of the papers focus on the relationship of the shape to the processes that determine the biological form, an issue of major continuing concern in biology.