

Supplementary online Material
article [TITLE]

Alexander Blanke¹, Helmut Schmitz², Alessandra Patera³, Hugo Dutel¹, Michael J. Fagan¹

¹ Medical and Biological Engineering Research Group, School of Engineering,
University of Hull, Hull HU6 7RX, UK

² Institute for Zoology, University of Bonn, Poppelsdorfer Schloss, 53115 Bonn, Germany

³ Swiss Light Source, Paul Scherrer Institut, Villigen, 5232, Switzerland

Contact: Alexander Blanke; a.blanke@hull.ac.uk

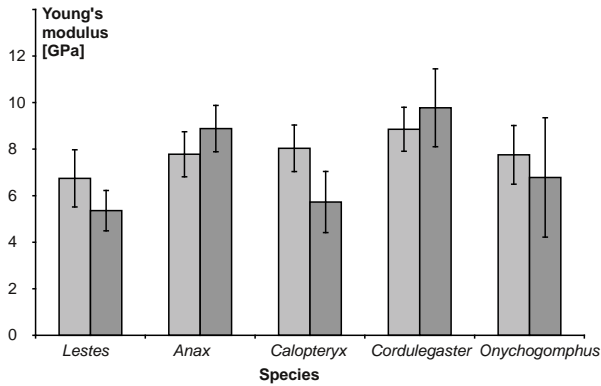


Figure S1 Results for the Young's modulus (GPa) of the nanoindentation experiments for dry (light grey) and rewetted (dark grey) mandibles of five odonate species.

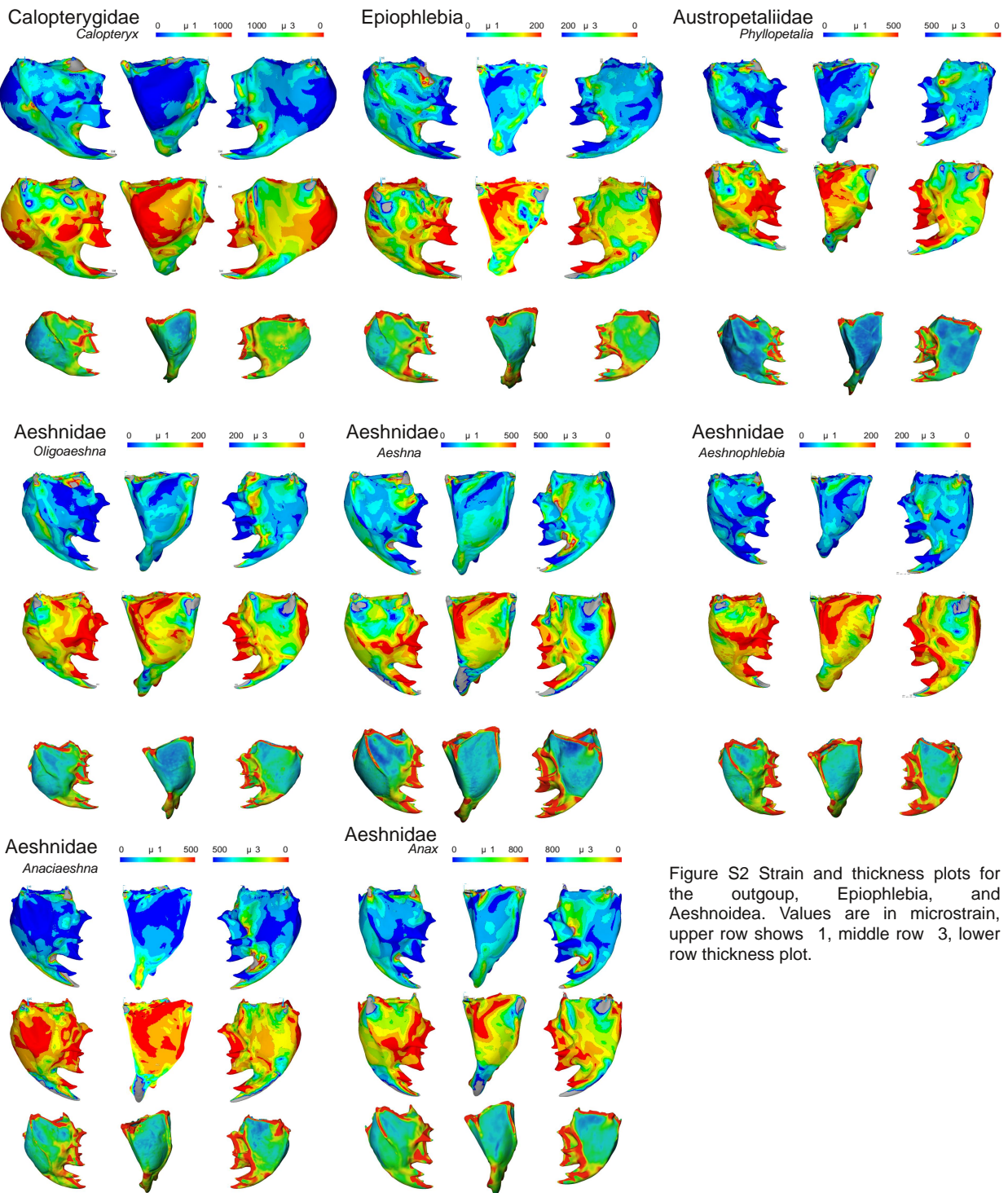


Figure S2 Strain and thickness plots for the outgroup, Epiophlebia, and Aeshnoidea. Values are in microstrain, upper row shows 1, middle row 3, lower row thickness plot.

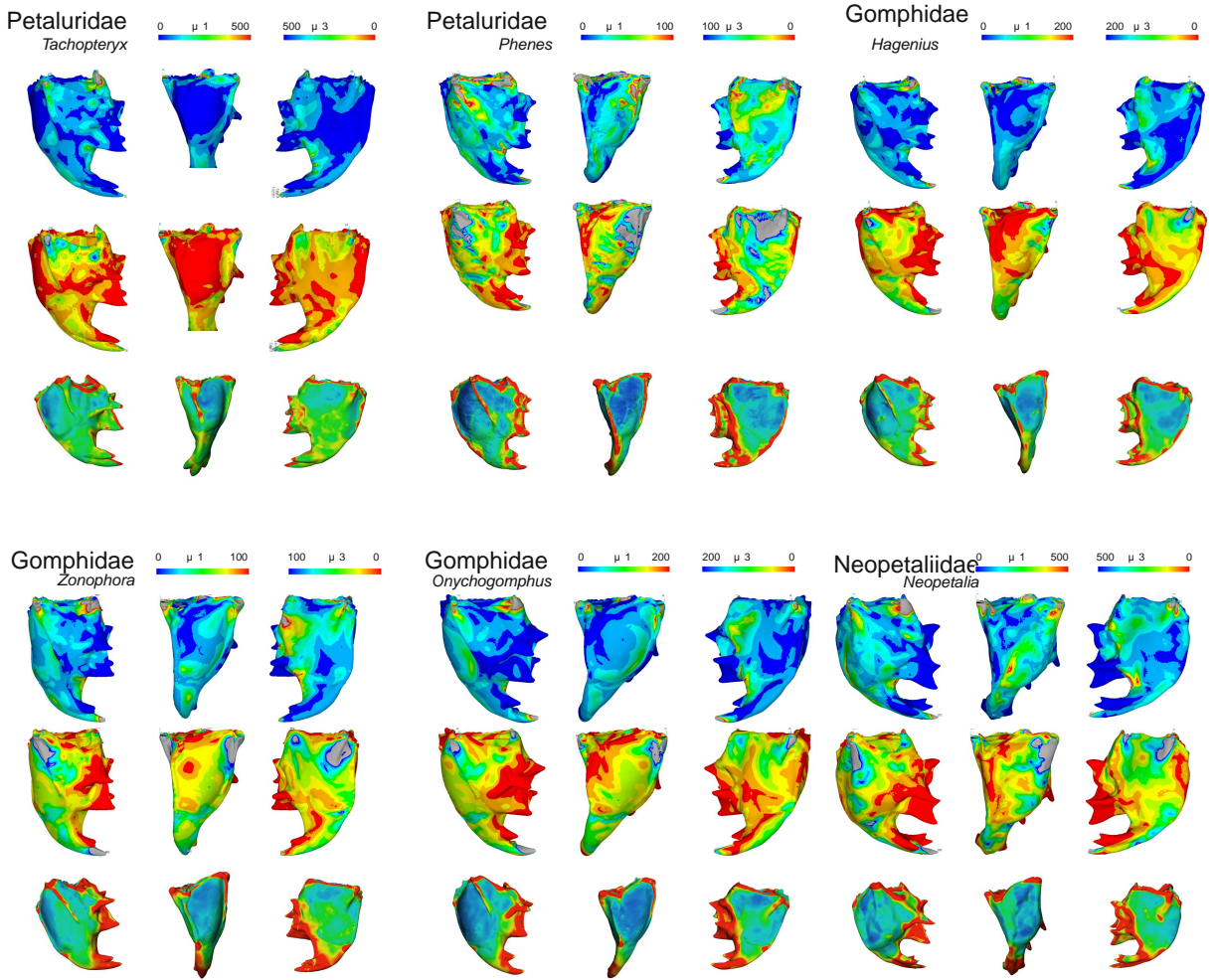
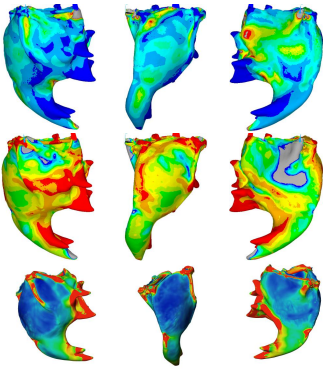


Figure S3 Strain and thickness plots for Petaluridae, Gomphidae and Neopetaliidae. Values are in microstrain, upper row shows 1, middle row 3, lower row thickness plot.

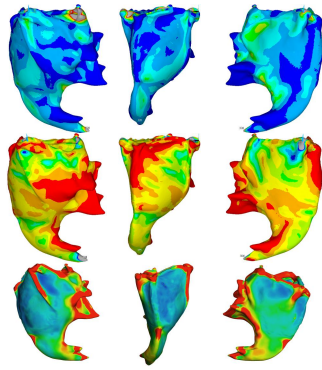
Cordulegastridae

Anotogaster 0 μ 1 100 200 μ 3 0



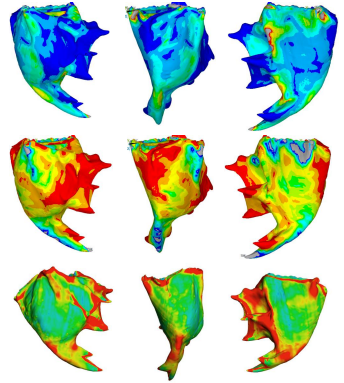
Cordulegastridae

Cordulegaster 0 μ 1 500 500 μ 3 0



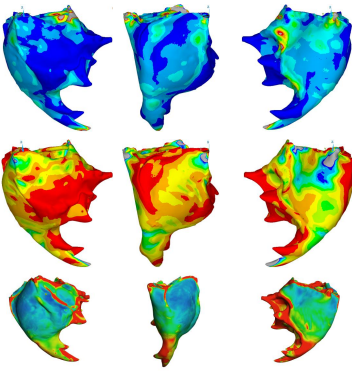
Corduliidae

Cordulia 0 μ 1 500 500 μ 3 0



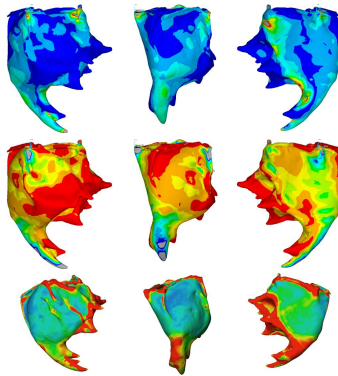
Macromiidae

Epoptalmia 0 μ 1 200 200 μ 3 0



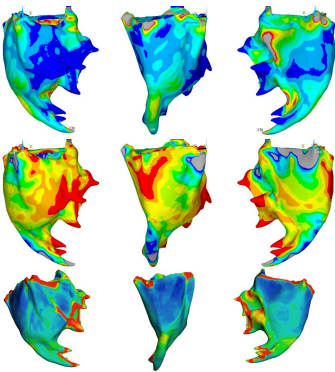
Macromiidae

Macromia 0 μ 1 300 300 μ 3 0



Libellulidae

Sympetrum 0 μ 1 1000 1000 μ 3 0



Libellulidae

Libellula 0 μ 1 1000 1000 μ 3 0

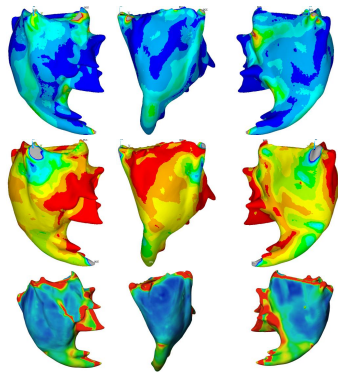


Figure S4 Strain and thickness plots for Cordulegastridae, Corduliidae, Macromiidae and Libellulidae. Values are in microstrain, upper row shows 1, middle row 3, lower row thickness plot.