TWO NEW SPECIES OF *ICHTHYOSAURUS* FROM THE LOWERMOST JURASSIC (HETTANGIAN) OF SOMERSET, ENGLAND, UK

DEAN R. LOMAX1 and JUDY A. MASSARE2

1School of Earth, Atmospheric and Environmental Sciences, The University of Manchester, Oxford Road, Manchester, M13 9PL, UK dean.lomax@manchester.ac.uk

2Department of Earth Sciences, SUNY College at Brockport, Brockport, NY 14420 jmassare@brockport.edu

SUPPLEMENTARY INFORMATION

Fig. S1: Change in centrum dimensions along the vertebral column in ANSP 15766, *Ichthyosaurus somersetensis* sp. nov. Data are from Table S1. Vertical lines denote the approximate positions of the transition from dorsal to caudal centra and from caudal to fluke centra.

Note that centrum height and length decrease from about centrum no. 40 to the tail fluke.

Table S1: Centrum dimensions for ANSP 15766, *Ichthyosaurus somersetensis* sp. nov.

Centrum length (LEN), centrum height (HT), and the HT/LEN ratio are given in the table below. The last double-headed rib is on centrum no. 47, which marks the last dorsal centrum, making centrum no. 48 the first caudal centrum. The apical centra begin with centrum no. 75 and continue to no. 83 or 84.

Asterisk denotes a measurement that is estimated because the centrum was rotated, damaged, or partially buried.

|  |  |  |  |
| --- | --- | --- | --- |
| CENTRUM NUMBER | CENTRUM LEN (CM) | CENTRUM HT (CM) | HT/LEN RATIO |
| 1 | 1.14 |  4.37\* | 3.83 |
| 2 | 1.39 |  4.12  | 2.96 |
| 3 | 1.45 | 3.32 | 2.29 |
| 4 | 1.35 |  |  |
| 5 |  1.58\* | 3.31 | 2.09 |
| 6 | 1.60 |  |  |
| 7 | 1.48 |  |  |
| 8 | 1.31 | 3.34 | 2.55 |
| 9 |  | 3.54 |  |
| 10 | 1.62 | 3.02 | 1.86 |
| 11 | 1.57 | 3.35 | 2.13 |
| 12 | 1.81 |  |  |
| 13 | 1.84 |  |  |
| 14 | 1.92 |  |  |
| 15 | 1.86 | 3.40 | 1.83 |
| 16 | 1.81 | 3.51 | 1.94 |
| 17 | 1.73 | 4.05 | 2.34 |
| 18 | 1.90 | 4.06 | 2.14 |
| 19 | 2.18 | 4.30 | 1.97 |
| 20 | 2.10 | 3.97 | 1.89 |
| 21 | 2.17 | 4.55 | 2.10 |
| 22 | 2.15 |  |  |
| 23 | 2.25 | 3.25 | 1.44 |
| 24 | 2.35 |  |  |
| 25 | 2.25 |  |  |
| 26 | 2.20 |  |  |
| 27 | 2.23 |  |  |
| 28 | 2.39 |  |  |
| 29 | 2.20 |  |  |
| CENTRUM NUMBER | CENTRUM LEN (CM) | CENTRUM HT (CM) | HT/LEN RATIO |
| 30 | 2.55 |  |  |
| 31 | 2.38 |  |  |
| 32 | 2.42 |  |  |
| 33 | 2.32 |  |  |
| 34 | 2.08 |  |  |
| 35 | 2.18 | 4.41 | 2.02 |
| 36 | 2.29 | 4.51 | 1.97 |
| 37 | 2.27 | 4.34 | 1.91 |
| 38 | 2.31 | 4.48 | 1.94 |
| 39 | 2.64 | 4.65 | 1.76 |
| 40 |  2.32\* | 4.71 | 2.03 |
| 41 |  2.15\* | 4.60 | 2.14 |
| 42 | 2.06 | 4.65 | 2.26 |
| 43 | 2.16 | 4.52 | 2.09 |
| 44 |  2.24\* | 4.61 | 2.06 |
| 45 |  2.12\* | 4.36 | 2.06 |
| 46 |  1.81\* | 4.42 | 2.44 |
| 47 | 1.87 | 4.42 | 2.36 |
| 48 | 2.02 | 4.35 | 2.15 |
| 49 | 1.92 | 4.48 | 2.33 |
| 50 | 1.93 | 4.25 | 2.20 |
| 51 | 2.11 | 4.17 | 1.98 |
| 52 | 2.09 | 4.03 | 1.93 |
| 53 | 2.02 | 4.19 | 2.07 |
| 54 | 1.92 | 3.98 | 2.07 |
| 55 | 1.82 | 3.87 | 2.13 |
| 56 | 2.05 |  3.99\* | 1.95 |
| 57 | 1.71 | 3.82 | 2.23 |
| 58 | 1.72 | 3.67 | 2.13 |
| 59 | 1.71 | 3.66 | 2.14 |
| 60 |  1.41\* | 3.64 | 2.58 |
| 61 |  1.52\* | 3.60 | 2.37 |
| 62 | 1.65 | 3.62 | 2.19 |
| 63 | 1.35 | 3.44 | 2.55 |
| 64 | 1.34 | 3.22 | 2.40 |
| 65 | 1.47 | 3.26 | 2.22 |
| 66 | 1.25 | 3.38 | 2.70 |
| 67 |  1.26\* | 3.20 | 2.54 |
| CENTRUM NUMBER | CENTRUM LEN (CM) | CENTRUM HT (CM) | HT/LENRATIO |
| 68 |  1.22\* | 3.23 | 2.65 |
| 69 |  1.38\* |  |  |
| 70 | 1.30 | 2.69 | 2.07 |
| 71 |  |  2.51\* |  |
| 72 | 1.18 | 2.46 | 2.08 |
| 73 | 1.08 | 2.31 | 2.14 |
| 74 | 1.08 | 2.37 | 2.19 |
| 75 |  0.67\* | 2.19 | 3.27 |
| 76 |  0.67\* | 2.10 | 3.13 |
| 77 |  0.63\* | 1.97 | 3.13 |
| 78 |  0.55\* | 1.82 | 3.34 |
| 79 | 0.54 | 2.01 | 3.72 |
| 80 | 0.51 | 1.78 | 3.49 |
| 81 |  | 2.04 |  |
| 82 |  | 2.05 |  |
| 83 | 0.71 | 2.14 | 3.01 |
| 84 | 0.74 | 1.93 | 2.61 |
| 85 | 0.78 | 1.99 | 2.55 |
| 86 | 0.86 | 2.00 | 2.33 |
| 87 | 0.86 | 1.97 | 2.29 |
| 88 | 0.90 | 1.83 | 2.03 |
| 89 | 0.93 | 1.81 | 1.95 |
| 90 | 0.89 | 1.86 | 2.09 |
| 91 | 0.83 | 1.80 | 2.17 |
| 92 | 0.83 | 1.74 | 2.10 |
| 93 | 0.88 | 1.71 | 1.94 |
| 94 | 0.90 | 1.71 | 1.90 |
| 95 | 0.84 | 1.71 | 2.04 |
| 96 | 0.78 | 1.63 | 2.09 |
| 97 | 0.83 | 1.65 | 1.99 |
| 98 |  |  |  |
| 99 | 0.70 | 1.44 | 2.06 |
| 100 | 0.67 | 1.39 | 2.07 |