**Supplementary material to: Roux et al., EOCENE STALKED CRINOIDS IN THE GENUS *ISSELICRINUS* (ECHINODERMATA, CRINOIDEA, ISOCRINIDA) FROM NORTHEASTERN ITALY**

**Table 2**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MGP-PD** | **L** | **Dm** | **Nb Col** | **Nb Nd** | **Hm** | **H/D** | **Pores** | **Shape** | **R** | **A** | **Place in stalk** |
| 1312R | 10.01 | 8.15 | 7 | 0 | 1.43 | 0.17 | ++ | S+++ | R+ | A+ | Proximal |
| 1310Rc | 24.04 | 8.88 | 14 | 0 | 1.72 | 0.19 | +++ | S+++ | Rc | A-- | + Proximal |
| 1309Rb | 22.39 | 8.95 | 10 | 0 | 2.24 | 0.25 | ++ | Sr | Rc | A-- | Middle dist |
| 1316R | 28.25 | 8.87 | 18 | 1 | 1.66 | 0.19 | +++ | S+++ | R++ | A+ | Proximal |
| 1307R | 59.88 | 9.62 | 27 | 1 | 2.22 | 0.23 | ++ | S | Rc | A-- | Middle |
| 1310Rb | 29.09 | 10.08 | 12 | 0 | 2.42 | 0.24 | ++ | Sr+ | Rc - | 0 | Middle |
| 1308R | 87.88 | 10.35 | 38 | 1 | 2.49 | 0.24 | ++ | S | Rc - | A | Middle prox |

Tab. 2: Stalk fragment characters of *Isselicrinus**baldoensis*n. sp.morphotype A from Cambrigar. From left to right - MGP-PD: catalogue number of stalk fragment in MGP-PD, L: pluricolumnal length, Dm: maximum columnal diameter, Nb Col: number of columnals, Nb Nd: number of nodals, Hm: mean columnal height (L/Nb Col), H/D: columnal thickness, Pores: development of interarticular pores, Shape: pluricolumnal shape across (S: stellate, Sr: stellate with rounded angles), R: ridge at mid columnal height (Rc: coarse ridge), A: alternation of thin and thick columnals, + or -: more or less marked character. Values in mm, except H/D.

**Table 3**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MGP-PD** | **L** | **Dm** | **Nb Col** | **Nb Nd** | **Hm** | **H/D** | **Pores** | **Shape** | **R** | **A** | **Place in stalk** |
| 1322Rg | 11.93 | 3.41 | 11 | 0 | 1.08 | 0.32 | ++ | S | R-- | A-- | Middle |
| 1318Re | 14.70 | 4.97 | 11 | 1 | 1.34 | 0.27 | ++ | S+ | 0 | 0 | Middle dist |
| 1309Ra | 55.75 | 6.49 | 39 | 1 | 1.45 | 0.22 | +++ | S+++ | R- | A+ | Proximal |
| 1324R | 4.62 | 6.55 | 2 | 0 | 2.31 | 0.35 | ++ | S++ | R- | 0 | Middle prox |
| 1322Rf | 20.33 | 7.12 | 12 | 1 | 1.69 | 0.24 | ++ | S++ | R | A-- | Middle |
| 1321R | 7.07 | 7.63 | 4 | 0 | 1.77 | 0.23 | ++ | S++ | R-- | 0 | Middle dist |
| 1318Rb | 11.62 | 7.87 | 5 | 0 | 2.32 | 0.29 | + | SP | R- | 0 | Middle dist+ |
| 1310Ra | 29.73 | 8.52 | 13 | 0 | 2.29 | 0.27 | ++ | Sr | Rc | A-- | Middle |
| 1320R | 22.39 | 8.78 | 10 | 1 | 2.24 | 0.25 | ++ | S- | R | 0 | Middle dist |
| 1313R | 6.70 | 8.84 | 4 | 0 | 1.67 | 0.19 | ++ | S++ | R- | A- | Middle prox |
| 1322Re | 10.54 | 8.89 | 5 | 0 | 2.11 | 0.24 | + | SP | 0 | 0 | Middle dist |
| 1322Rc | 26.08 | 8.92 | 12 | 1 | 2.17 | 0.24 | + | SP | R-- | 0 | Middle dist |
| 1318Rg | 10.95 | 8.93 | 5 | 0 | 2.19 | 0.24 | +++ | S | R | 0 | Middle |
| 1317R | 24.05 | 8.98 | 11 | 1 | 2.19 | 0.24 | ++ | SP | R- | 0 | Middle dist |
| 1322Rb | 42.34 | 9.41 | 17 | 1 | 2.49 | 0.26 | + | SP | R-- | 0 | Middle dist |
| 1322Rd | 20.72 | 9.65 | 8 | 0 | 2.59 | 0.27 | + | SP | 0 | 0 | Middle dist |
| 1322Ra | 33.51 | 9.90 | 13 | 0 | 2.79 | 0.28 | + | SP | R-- | A-- | Middle dist |

Tab. 3: Stalk fragment characters of *Isselicrinus**baldoensis* n. sp. morphotype B from Cambrigar. SP: pentagonal slightly stellated, other abbreviations see Tab. 2. Values in mm, except H/D.

**Table 4**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Columnal characters** | **Nb****Plc** | **Nb****Col** | **Diameter (D)** | **Height (H)** | **Thickness (H/D)** |
| **min** | **mean** | **max** | **min** | **mean** | **max** | **min** | **mean** | **max** |
| *I. baldoensis* MA | 7 | 127 | 8.15 | 9.27 | 10.35 | 1.43 | 2.01 | 2.49 | 0.17 | 0.22 | 0.25 |
| *I. baldoensis* MB | 17 | 182 | 3.41 | 7.55 | 9.90 | 1.08 | 2.02 | 2.79 | 0.19 | 0.25 | 0.35 |
| *I. diaboli* | 23 | 207 | 6.28 | 7.42 | 9.09 | 1.86 | 2.18 | 2.70 | 0.24 | 0.29 | 0.35 |

Tab. 4: Variation of quantitative characters in the two *Isselicrinus* species from Cambrigar. MA: morphotype A, MB: morphotype B, other abbreviations see Tab. 2. Values in mm, except H/D.

**Table 5**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **MGP-PD**  | **Nb Plc** | **Diameter (D)** | **Height (H)** | **Thickness (H/D)** |
| **min** | **mode** | **max** | **min** | **mode** | **max** | **min** | **mode** | **max** |
| 1057 | 8 | 6.16 | 7.1-7.6 | 7.59 | 1.88 | 1.9-2.2 | 2.31 | 0.26 | 0.25-0.30 | 0.36 |
| 7829 | 63 | 5.25 | 7.0-7.4 | 7.80 | 1.73 | 2.0-2.2 | 2.58 | 0.23 | 0.30-0.35 | 0.42 |
| 18341 | 24 | 6.12 | 7.0-7.4 | 7.94 | 1.61 | 1.8-2.4 | 2.68 | 0.24 | 0.25-0.35 | 0.40 |
| 23437 | 13 | 5.55 | 6.5-7.4 | 7.97 | 1.37 | 2.2-2.4 | 2.35 | 0.25 | 0.30-0.35 | 0.34 |
| Total | 108 | 5.25 | 7.0-7.4 | 7.97 | 1.37 | 2.0-2.2 | 2.68 | 0.23 | 0.30-0.35 | 0.42 |

Tab. 5: Variation of quantitative columnal characters in *Isselicrinus diaboli* from the type-locality San Pancrazio. See text and Tab. 2 for abbreviations. Values in mm, except H/D.

**Table 6**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MGP-PD** | **L** | **Dm** | **Nb Col** | **Nb Nd** | **Hm** | **H/D** | **Pores** | **Shape** | **R** | **A** | **Place in stalk** |
| 1318Rd | 13.01 | 6.28 | 6 | 0 | 2.17 | 0.34 | 0 | RP+ | 0 | 0 | distal |
| 1309Rc | 56.58 | 6.62 | 27 | 0 | 2.10 | 0.32 | 0 | P | 0 | 0 | distal |
| 1319R | 43.71 | 6.75 | 19 | 0 | 2.30 | 0.34 | + | Sr- | R- | A-- | middle/prox. |
| 1323Rb | 16.35 | 6.83 | 9 | 0 | 1.86 | 0.27 | + | RP- | 0 | 0 | middle/distal |
| 1315Rb | - | 7.00 | >2 | - | 2.37 | 0.34 | - | RP | - | - | distal? |
| 1323Rf | 14.30 | 7.31 | 8 | 1 | 2.14 | 0.29 | 0 | SPr | 0 | 0 | middle/distal |
| 1306R | 25.40 | 7.35 | 12 | 1 | 2.12 | 0.29 | +- | SPr | 0 | 0 | middle/distal |
| 1305Ra | 67.12 | 7.37 | 30 | ? | 2.15 | 0.29 | + | Sr- | 0 | 0 | middle/prox. |
| 1323RG | 12.35 | 7.43 | 6 | 0 | 2.06 | 0.28 | ++ | S | 0 | 0 | middle/prox. |
| 1318Rc | 18.07 | 7.45 | 8 | 0 | 2.26 | 0.30 | 0 | RP | 0 | 0 | distal |
| 1318Rf | 14.60 | 7.60 | 6 | 0 | 2.43 | 0.32 | 0 | P | 0 | 0 | distal |
| 1323Rh | 13.18 | 7.60 | 6 | 0 | 2.20 | 0.29 | ++ | S | 0 | 0 | middle/prox. |
| 1305Rb | 31.39 | 7.65 | 14 | 1 | 2.24 | 0.29 | ++ | Sr+ | 0 | 0 | middle/prox. |
| 1323Re | 8.55 | 7.85 | 4 | 0 | 2.14 | 0.27 | ++ | RP+ | R- | 0 | middle/distal |
| 1311R | 14.78 | 8.00 | 6 | 1 | 2.46 | 0.31 | ~0 | P- | 0 | 0 | distal |
| 1323Rd | 9.67 | 8.05 | 5 | 0 | 1.93 | 0.24 | ++ | SP | R- | 0 | middle/prox. |
| 1314R | 10.81 | 8.24 | 4 | 0 | 2.70 | 0.33 | 0 | Sr- | 0 | 0 | middle/distal |
| 1315Ra | 12.34 | 8.27 | 6 | 0 | 2.06 | 0.25 | +-- | Sr+ | R-- | 0 | middle |
| 1323Ra | 27.26 | 8.31 | 13 | 0 | 2.10 | 0.25 | 0 | RP | 0 | 0 | distal |
| 1323Rc | 14.76 | 8.43 | 7 | 0 | 2.11 | 0.25 | + | Sr | R-- | 0 | middle |
| 1318Ra | 14.62 | 8.70 | 6 | 1 | 2.44 | 0.28 | 0 | RP | 0 | 0 | distal |
| 1318Rh | 4.64 | 8.97 | 2 | 0 | 2.32 | 0.26 | 0 | Sr+ | 0 | ? | middle |
| 1318Ri | 2.50 | 9.09 | 1 | 0 | 2.50 | 0.27 | + | Sr+ | R- | ? | middle |

Tab. 6: Stalk fragment characters of *Isselicrinus diaboli* from Cambrigar. P: pentagonal, RP: rounded pentagonal, SPr: pentagonal slightly stellated and with rounded angles, other abbreviations see Tabs. 2 and 3. Values in mm, except H/D.

**Table 7**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **N°** | **L** | **Dm** | **Nb Col** | **Nb Nd** | **Nb infN** | **Hm** | **H/D** | **Pores** | **Shape** | **Place in stalk** |
| 1 | 10.97 | 5.25 | 5 | 1 | 0 | 2.19 | 0.42 | 0 | P | Middle distal |
| 2 | 10.47 | 5.40 | 5 | 0 | 0 | 2.09 | 0.39 | + | P | Middle |
| 3 | 12.50 | 5.56 | 6 | 1 | 0 | 2.08 | 0.37 | + | P | Middle |
| 4 | 9.72 | 5.65 | 5 | 0 | 0 | 1.94 | 0.34 | 0 | RP | Middle distal |
| 5 | 13.53 | 5.69 | 6 | 0 | 0 | 2.26 | 0.40 | 0 | RP | Distal |
| 6 | 12.18 | 5.74 | 7 | 0 | 0 | 1.74 | 0.30 | 0 | P | Middle proxim. |
| 7 | 15.16 | 5.74 | 7 | 0 | 0 | 2.17 | 0.38 | + | P | Middle distal |
| 8 | 12.82 | 5.89 | 7 | 0 | 1 | 1.83 | 0.32 | ++ | P | Middle proxim.  |
| 9 | 10.07 | 5.95 | 5 | 0 | 0 | 2.01 | 0.34 | +++ | Sr | Proximal |
| 10 | 13.37 | 6.06 | 6 | 0 | 0 | 2.23 | 0.37 | + | P | Middle |
| 11 | 10.35 | 6.15 | 5 | 0 | 0 | 2.07 | 0.34 | 0 | P | Middle |
| 12 | 10.35 | 6.35 | 5 | 0 | 0 | 1.63 | 0.26 | 0 | P | Middle proxim. |
| 13 | 9.31 | 6.38 | 5 | 1 | 0 | 1.86 | 0.29 | ++ | P | Middle proxim. |
| 14 | 9.56 | 6.51 | 5 | 0 | 0 | 1.91 | 0.29 | ++ | RP-  | Middle distal |
| 15 | 16.30 | 6.55 | 8 | 0 | 1 | 2.04 | 0.31 | ++ | P | Middle proxim. |
| 16 | 12.36 | 6.56 | 5 | 1 | 0 | 2.47 | 0.38 | + | RP+ | Distal |
| 17 | 6.1 | 6.68 | 3 | 0 | 0 | 2.03 | 0.30 | +++ | Sr | Proximal |
| 18 | 12.65 | 6.69 | 6 | 0 | 1 | 2.11 | 0.31 | + | RP | Distal |
| 19 | 18.04 | 6.75 | 8 | 0 | 0 | 2.25 | 0.33 | + | P | Middle distal |
| 20 | 13.31 | 6.87 | 6 | 1 | 0 | 2.22 | 0.32 | + | P | Middle distal |
| 21 | 12.33 | 6.94 | 6 | 1 | 0 | 2.05 | 0.30 | ++ | P | Middle proxim. |
| 22 | 10.79 | 6.96 | 5 | 1 | 0 | 2.16 | 0.31 | + | RP- | Middle distal |
| 23 | 10.99 | 6.96 | 5 | 0 | 0 | 2.20 | 0.32 | ++ | P | Middle proxim. |
| 24 | 13.26 | 7.07 | 7 | 0 | 0 | 1.89 | 0.27 | + | RP- | Middle distal |
| 25 | 10.26 | 7.38 | 5 | 0 | 1 | 2.05 | 0.28 | + | P | Middle |
| 26 | 14.73 | 7.38 | 7 | 0 | 0 | 2.10 | 0.28 | ++ | P | Middle proxim. |
| 27 | 8.66 | 7.47 | 5 | 0 | 0 | 1.73 | 0.23 | + | RP | Distal |
| 28 | 10.32 | 7.54 | 5 | 1 | 0 | 2.06 | 0.27 | + | P | Middle proxim. |
| 29 | 14.47 | 7.58 | 7 | 0 | 0 | 2.07 | 0.27 | + | P | Middle proxim. |
| 30 | 11.11 | 7.59 | 5 | 0 | 0 | 2.22 | 0.29 | + | RP+ | Distal |
| 31 | 21.5 | 7.59 | 11 | ? | 0 | 1.95 | 0.26 | ++ | P | Middle proxim. |
| 32 | 9.35 | 7.65 | 5 | 1 | 0 | 1.87 | 0.24 | + | P | Middle proxim. |
| 33 | 12.86 | 7.66 | 6 | 0 | 0 | 2.14 | 0.28 | ++ | P | Middle proxim. |

Tab. 7: Stalk fragment characters of *Isselicrinus**diaboli* from San Pancrazio (from lot MGP-PD 7829). From 1 to 33: selection of successive increasing individual size with Dm as growth index. Nb infN: number of infranodals, other abbreviations see Tabs. 2 and 3. Values in mm, except H/D.