RECORD 1980/7

Supplement to : 'The Encrinuridae and related trilobite families, with a description of Silurian species from southeastern Australia'

by

D.L. Strusz

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This Record contains the background and other unpublished data for the paper by D.L. Strusz published in

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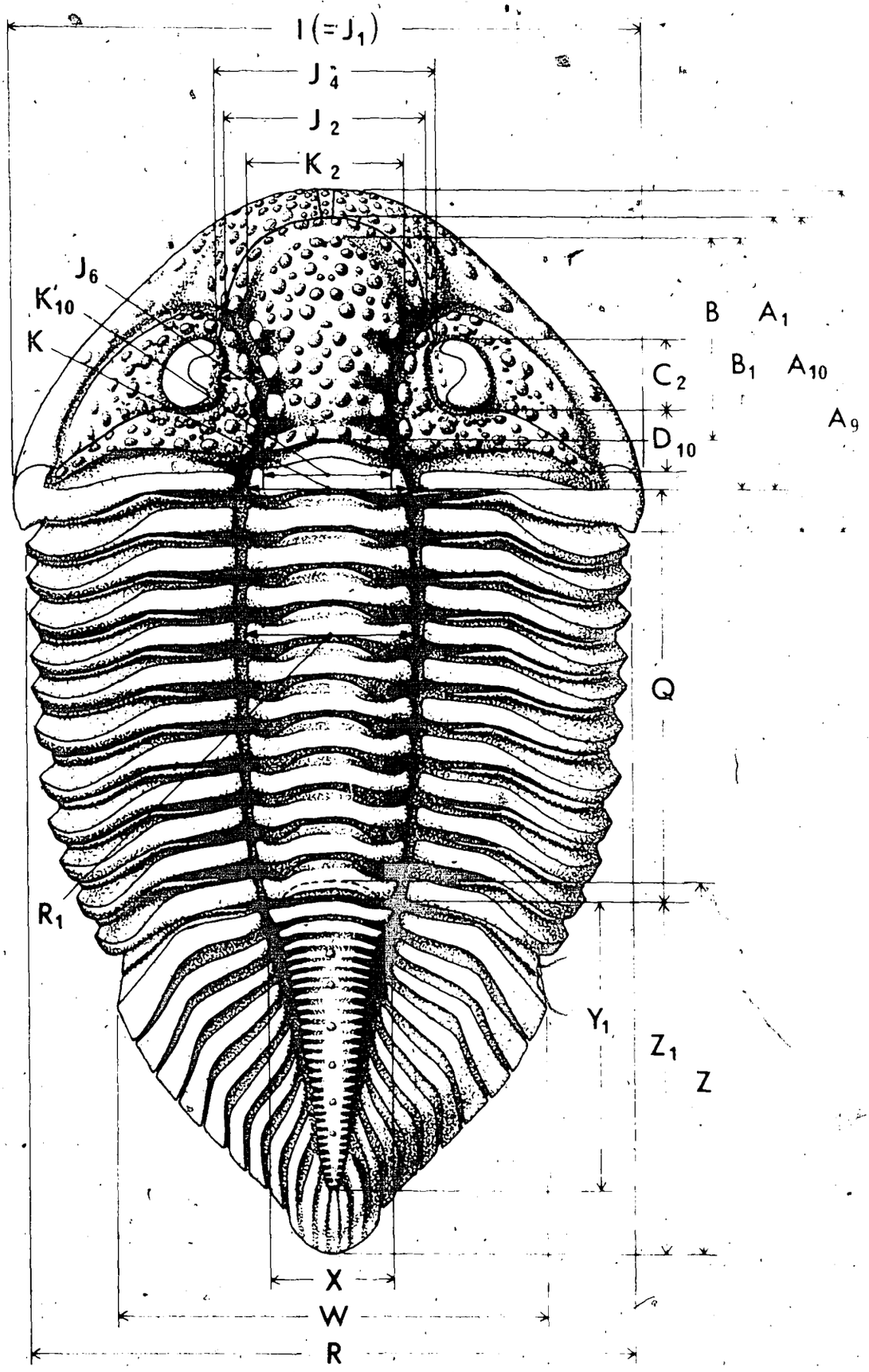
MEASURED CARAPACE DIMENSIONS

SYMBOLS



LOCALITY LIST, CANBERRA 1:250 000 SHEET

The majority of the collections used in this study were made prior to 1970, when B.M.R. localities were numbered according to 1:250 000 sheet areas, usually using an alpha-numeric system. Canberra sheet palaeontological localities were prefixed 'CC'. With the introduction of computerised storage and retrieval, a uniform 8-digit numbering system was set up, the first 4 digits being a year/project code, the last 4 digits unique to the locality (for that project). All palaeontological collections from the Canberra sheet area have been allocated the code 7448 — thus locality CC 101 becomes 7448 0101.

The collections from the localities listed here include encrinurinid specimens specifically assignable with the indicated degree of confidence. The list gives a brief geographic description, 1:100 000 sheet name, grid reference generally to the nearest 100m (Zone 55H of the Australian Map Grid), stratigraphic position and age. Extensive revisionary work is in progress, so some of this may need up-dating, but up to 1979, further information on the stratigraphic units mentioned may be found in:

OWEN, M., & WYBORN, D. (in press) — Geology and geochemistry of the Tantangara and Brindabella 1:100 000 sheet areas, N.S.W. and A.C.T. Bull. Bur. Miner. Resour. Aust.

PICKETT, J.W. (Ed.) (in prep.) — The Silurian System in New South Wales. Bull. geol. Surv. N.S.W., 29.

RICHARDSON, S.J., 1975 — A summary of the geology of the Michelago 1:100 000 sheet. Q. Notes geol. Surv. N.S.W., 21:1-7.

STRUSZ, D.L., 1971 — Canberra, Australian Capital Territory and New South Wales. Bur. Miner. Resour. Aust., Explanatory Notes, 1:250 000 Geol. Ser., Sheet SI/55-16.

——, 1976 — Silurian stratigraphic units of the southern part of the Molong High. Rec. Bur. Miner. Resour. Aust., 1975/147 (unpubl.)

STRUSZ, D.L., & HENDERSON, G.A.M., 1971 — Canberra City A.C.T. - 1:50 000 geological map and explanatory notes. Bur. Miner. Resour. Aust., Canberra; 20pp.

Locality 7448 ---

0006 — On ridge about $\frac{3}{4}$ km northeast of Harris' Hut, Cooleman Plains, about 55 km southwest of Canberra; Tantangara sheet, ca 495.565. Blue Waterhole Beds; Ludlow.

Encrinurus mitchelli.

0009 — At transmission-line pylone 100, beside the Long Plain Road (Kiandra - Brindabella) near turnoff to "Cooinbil" ruin, The Long Plain, about 60 km southwest of Canberra; Tantangara sheet, 438.565. Peppercorn Beds; about Llanllovery/Wenlock boundary.

E. mitchelli.

0013 -- Foundation excavations, northeast side of Gorema Place, Canberra Civic Centre; Canberra sheet, 939.939. Canberra Group (City Hill Shale?); Wenlock?

E. sp. cf. mitchelli.

0014 -- Trench at entrance to Sacred Heart Fathers' Monastery, Federal Highway, Watson (North Canberra); Canberra sheet, 962.993. Fairbairn Group?; Wenlock or early Ludlow.

E. sp. cf. mitchelli?

0016 -- North side of Cotter Road (West Canberra), opposite sewer vent about 200 m west of Tuggeranong Parkway; Canberra sheet, 7[illegible].993. Yarralumla Formation; early Ludlow?

E. mitchelli?, E. sp. cf. etheridgei.

0017 -- Crace Hill, Mitchell (North Canberra), northwest of Canberra Racecourse; Canberra sheet, ca 942.993. Canberra Group; Wenlock or early Ludlow.

E. mitchelli.

0020 -- South slope of Regatta Point, north shore of Lake Burley Griffin east of Commonwealth Avenue bridge, Canberra City; Canberra sheet, 936.925. Canberra Group (City Hill Shale); Wenlock?

E. sp. cf. mitchelli?

0022 -- Entrance to former Yarralumla brickworks, Yarralumla (South Canberra); Canberra sheet, 900.904. Yarralumla Formation; early Ludlow?

E. etheridgei?

Locality 7448 ---

0023-0037, 0043-0050, 0076, 0087 -- A number of very restricted localities within the old Yarralumla brickworks, Yarralumla (South Canberra); Canberra sheet, 901.905. Yarralumla Formation; early Ludlow?

E. mitchelli?, E. sp. cf. mitchelli, E. etheridgei?, E. sp. cf. etheridgei, E. sp. cf. silverdalensis.

0051 -- Trench for trunk sewer, Antill Street, Hackett (North Canberra), near intersection with Knox and Madigan Streets; Canberra sheet, 964.975. Fairbairn Group?; Wenlock or early Ludlow.

Coronocephalus sp. cf. urbis, E. mitchelli.

0052 -- Western part of foundation excavations for the Menzies Hall, Petrie Plaza, Canberra Civic Centre; Canberra sheet, 938.936. Canberra Group (City Hill Shale?); Wenlock or early Ludlow.

E. mitchelli, E. sp. cf. mitchelli, E. sp. cf. etheridgei?

0053 -- Tunnel for Southeast Suburbs Sewer Main, Parkes (South Canberra);

Sample A: Queen Victoria Terrace behind Parliament House; Canberra sheet, 934.911. Canberra Group (Camp Hill Sandstone); Wenlock.

E. sp. cf. etheridgei?

Sample B: Near East Block Offices, just west of Kings Avenue; Canberra sheet, 937.909. Canberra Group (Riverside Formation?); Wenlock.

E. mitchelli.

0057 -- Foundation excavations for St. Edmund's College, McMillan Crescent, Griffith (South Canberra); Canberra sheet, 949.888. Canberra Group (Riverside Formation); Wenlock.

E. mitchelli, E. sp. cf. mitchelli.

0062 -- Foundation excavations, north side of Cunningham Street, Kingston (South Canberra), between railway crossing and The Causeway; Canberra sheet, 953.895. Canberra Group (Riverside Formation); Wenlock.

E. mitchelli.

0066 -- Drill core and foundation excavations, Commonwealth Avenue Offices, King Edward Terrace, Parkes (South Canberra); Canberra sheet, 934.916. Canberra Group (Riverside Formation); Wenlock.

E. mitchelli (some transitional to E. civicae), E. sp. cf. etheridgei.

Locality 7448 ---

0072 -- Trench beside Newcastle Street, Fyshwick (southeast Canberra), probably near Gladstone Street; Canberra sheet, ca 973.886. Fairbairn Group; Wenlock?

E. mitchelli (some transitional to E. civicae), E. sp. cf. etheridgei.

0075 + 0146 -- Sewer vent about 100 m south of the Cotter Road and about 150 m west of the Tuggeranong Parkway (western Canberra); Canberra sheet, 874.893. Yarralumla Formation; early Ludlow?

E. mitchelli?, E. sp. cf. mitchelli, E. etheridgei?, E. sp. cf. silverdalensis.

0083 -- Trench? between St. John's Church and Canberra Olympic Swimming Pool, Reid (North Canberra); Canberra sheet, ca 942.928. Canberra Group (City Hill Shale?); Wenlock?

E. sp. cf. mitchelli.

0084 -- Tunnel at intersection of Kings Avenue and Queen Victoria Terrace, near East Block Offices, Parkes (South Canberra); Canberra sheet, 936.909. Canberra Group (Camp Hill Sandstone?); Wenlock.

E. mitchelli, E. sp. cf. mitchelli.

0085 -- Grounds of Church of England Boys' Grammar School, Flinders Way, Red Hill (South Canberra); Canberra sheet, ca 930.870. Yarralumla Formation; early Ludlow?

E. mitchelli, E. sp. cf. silverdalensis?

0086 -- Grounds of Forestry and Timber Bureau, Banks Street, Yarralumla (South Canberra); Canberra sheet, ca 913.910. Yarralumla Formation; early Ludlow?

E. mitchelli, E. sp. cf. etheridgei?

0101 -- Scarp above right bank of Molonglo River about 4 km below Coppins Crossing, 10 km west of Canberra Civic Centre; Canberra sheet, 835.945. Walker Volcanics; late? Wenlock.

Coronocephalus urbis, E. mitchelli, E. civicae.

0104 -- Trench, east side of Canberra Technical College, Constitution Avenue Reid (North Canberra); Canberra sheet, 943.928. Canberra Group (City Hill Shale?); Wenlock.

E. mitchelli.

Locality 7448 ---

0123 -- Curtin, Woden Valley (southwest Canberra) - exact location unknown, but probably in northeast corner of suburb; Canberra sheet, ca 895.895. Yarralumla Formation; early Ludlow?

E. mitchelli, E. sp. cf. mitchelli, E. etheridgei.

0143 -- Road cutting, north side of Adelaide Avenue about 300 m west of Kent Street overpass, Yarralumla (South Canberra); Canberra sheet, 904.899. Yarralumla Formation; early Ludlow?

E. mitchelli, E. sp. cf. mitchelli.

0156 -- Excavations for Capital Circle, northeast side of Capital Hill (South Canberra); Canberra sheet, 938.907. Canberra Group (Camp Hill Sandstone); Wenlock.

E. sp. cf. mitchelli, transitional to E. civicae?

0161 -- Trench for main sewer, south side of Ginninderra Creek about 200 m west of intersection of Conley Drive and Coplan? Drive, Melba (Belconnen, northwest Canberra); Canberra sheet, 867.007. Yass Subgroup; early Ludlow?

E. mitchelli, E. sp. cf. mitchelli.

0170 -- Yarralumla Creek, east of Champ Place, Curtin (Woden Valley, southwest Canberra); Canberra sheet, 895.880. Yarralumla Formation; early Ludlow?

E. etheridgei?, E. sp. cf. etheridgei.

0171 -- East side of the Tuggeranong Parkway, about 750 m south from its intersection with the Cotter Road (western Canberra); Canberra sheet, 876.837. Yarralumla Formation; early Ludlow?

E. mitchelli.

0174 -- Excavations for Capital Circle, northeast side of Capital Hill (South Canberra); Canberra sheet, 938.907. Canberra Group (Camp Hill Sandstone), stratigraphically below locality 7448 0156; Wenlock.

Coronocephalus urbis, E. mitchelli, E. sp. cf. mitchelli?

0177 -- About 150 m south of the Molonglo River, on fire trail at north end of "Bluett's" pine plantation, left bank of river about 2.9 km below Coppins Crossing, 10 km west of Canberra Civic Centre; Canberra sheet, 840.938. Walker Volcanics; late? Wenlock.

C. urbis, E. mitchelli, E. civicae.

Locality 7448 ---

0193 -- West bank of Cappanana Creek 6 km east-northeast of Bredbo (between Canberra and Cooma), 1 km north from the Bredbo-Jerangle road on track to woolshed; Michelago sheet, 992.215. Cappanana Formation; late Wenlock.

E. mitchelli.

0234 -- Foundation excavations for extension to west wing of Parliament House, Parkes (South Canberra); Canberra sheet, 934.912. Canberra Group (Riverside Formation); Wenlock.

E. mitchelli.

0240 -- Northwestern end of sewerage trench along north side of Beltana Road, near Canberra airport, Pialligo (eastern Canberra); Canberra sheet, 980.90[illegible]. Fairbairn Group?; Wenlock or early Ludlow.

E. mitchelli.

0257 -- Low ridge east of Ginninderra Creek, near Palamera Street, Giralang (Belconnen, northwest Canberra); Canberra sheet, ca 901.01[illegible]. Yass Subgroup; early Ludlow?

Coronocephalus urbis, E. mitchelli?

0258 -- Gully on east side of Antill Street, Hackett (North Canberra), 1.45 km south from the Federal Highway; Canberra sheet, 970.0[illegible]1. Fairbairn Group?; Wenlock or early Ludlow. Donated D. Kaus.

E. silverdalensis.

0263 -- About 100 m west of Barton Highway, 9.4 km north from the A.C.T. border near Hall; Canberra sheet, 947.163. Yass Subgroup; early Ludlow?

E. etheridgei?

0273 -- East bank of Lake Ginninderra about 200 m south of Belconnen Naval Station fence, McKellar (Belconnen, northwest Canberra); Canberra sheet, 894.000. Yass Subgroup; early Ludlow?

E. silverdalensis?

0285 -- Trench for trunk sewer, about 200 m east of the Molonglo River approximately 4 km below Coppins Crossing, 10 km west of Canberra Civic Centre; Canberra sheet, 837.945. Walker Volcanics; late? Wenlock.

C. urbis, E. mitchelli, E. civicae.

DATA SHEET — ENCRINURID MEASUREMENTS

17.11.1976

Coronocephalus urbis — locality 7448 0101

CPC specimens Walker Volcanics (Canberra 1:250 000 sheet)

SPECIMEN NUMBER preserved as —	CPC 18037 c incompl.	18038 (A+B) s incompl.	the same c	18039 s	18040	18041 s (worn)	18042 s incompl.	18044 s	18045	18046 c incompl.
A1	10*	8.8*	—	7.1		8.2		6.5		10.6
A9	—	—	—	—		—		—		—
A10	—	—	—	ca 17*		—		—		—
B	7.4	6.7*	—	5.0		6.5		4.9		7.8
B1	8.6	7.7*	—	5.8		7.4		5.9		8.9
C2	2.6	1.9	2.4	1.7		1.7		1.7		2.5
D10	2.3	2.4	1.9	1.7		2.0		1.8		2.0
I = J1	—	18.2* d	—	12*		17.5		—		—
J2	9.3	13.8	9.0	6.4		8.2		6.2		—
J4	12.4 d	11.3	11.1	8.0 d		ca 9.2*		8.6 d		14.6
J6	3.1	3.5	3.3	2.9		3.6		2.5		3.8
K	5.4 d	4.3	4.6	2.8		3.1		2.6		5.7
K2	5.5	4.7	5.1	3.5		4.6		3.1		5.8
K'10	3.9	3.0	3.6	2.3		2.2		1.9		3.9
Q			—							
R			1st radial ring: 5.0							
R1			—							
W					14.0		14.1		ca 18*	
X					4.2		3.3		5.4	
Y1					9.2		—		11.8	
Z					11.0		—		14.4	
Z1					10.5		—		13.7	
Nr. PLEURAE					11 left 11½ right		>8		12¼ left 12 right	
NUMBER OF RACHIAL RINGS					≥ 26		>14		29	
TUBERCLES ON RINGS —					2, 3, 5P, 6, 7, 11, 21		2, 3P, 4P, 5, 6P, 9?, ...		2, 4P, 5, 6, 7, 9, 10P, 11?, 16	
A					—		—		—	
P					—		—		—	
COMMENTS	shows relation of visual surface of eye to pelpebral lobe	spines ∥ axis			teratogenic. very low pleural tubercles				teratogenic; last pleura fused behind rachis, small.	

ABBREVNS: ⊖ carapace; ⌂ cephalon; △ cranidium; D librigena; ▭ thorax; ▽ pygidium; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis 7448 0101 17.11.1976

CPC specimens

SPECIMEN NUMBER	CPC 18047	18049	18051	18053	18054	18055	18056	18058	18060	18061
preserved as —	△ s	△ c incompl.	△ c incompl.	▽ s incompl.	▽ s	▽	▽ c	△ s incompl.	△ c incompl.	▽
A1	5.7	—	—					—	—	
A9	—	—	—					—	—	
A10	14.0	—	—					—	—	
B	4.2	—	7.5					—	—	
B1	5.0	—	8.9					—	—	
C2	1.3	2.6	3.2					1.3	2.6	
D10	1.6	2.2	3.5					1.5	1.8	
I = J1	10.2d	20.8d	24.4d					11.0	20.8	
J2	5.5	—	—					—	—	
J4	6.0	12.5	13.6					6.9	12.2	
J6	(1.9?)	3.4	4.0					2.3	3.8	
K	2.1	4.6	5.7					2.2	5.1	
K2	2.8	—	6.0					3.0	5.7	
K'10	1.5	3.6	4.3					1.9	4.0	
Q										
R										
R1										
W				12.2	12.0	14.1	12.2d			11.6
X				3.5	3.2	4.0	3.1			3.3
Y1				—	ca8 *	10.1	6.5			7.2
Z				—	9.3	11.6	7.6			8.5
Z1				—	8.8	11.1	7.3			7.7
Nr. PLEURAE				>9	9a10	11	11			11
NUMBER OF RACHIAL RINGS				>21	ca23	28	25			ca24
TUBERCLES ON RINGS —				1, 2P, 3?, 5, 7P, 9, 14 (all faint)	2, 3, 6, 7, 11	2P?, 4, 5, 8, 12, 17 (all low)	1, 4, 5?, 7, 12a15, 20?			2, 5P, 9, 12P, 14?, 18, 20?
★										
P'										
COMMENTS						faint pleural tubercles	rachis damaged			last pleura fused behind rachis

ABBREVNS: ⊖ carapace; ○ cephalon; ◐ librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

18.11.1976

13

C. urbis

7448 0101

CPC specimens

SPECIMEN NUMBER preserved as —	CPC 18062 ⬭ s	18063 △ c incompl.	18064 ⬭ s	18065 △ s	18066 △ s	18067 ⬭	18069 ⬭ c incompl.	18070 ⬭ s	18071 ⬭ c incompl. & distorted	18072 (A) △ s incompl.
A1		11.7		8.3	9.4					5.0
A9		—		—	—					—
A10		—		17.7	—					—
B		9.2		6.2	6.7					3.7
B1		10.2		7.2	7.6					4.5
C2		3.1		1.6	1.7					1.2
D10		2.5		2.1	2.5					1.2
I = J1		—		17.7 d	19.3					12.2 d
J2		12.7		8.1	6.9*					5.2 d
J4		15.6		11.0 d	11.5					6.7 d
J6		5.0		3.5	3.5					1.8
K		6.7		3.9						2.6
K2		7.4		4.3	4.5					2.8
K'10		4.5		2.7	3.1					1.9
Q										
R										
R1										
W	16.6		12.1			11.4	12.4	8.1	—	
X	4.8		3.1			3.1	3.6*	1.9	3.9	
Y1	10.7		8.0			7.3	7.4*	4.4	8.7	
Z	13.0		9.1			8.3	—	5.3	9.7	
Z1	12.0		8.8			8.0	8.3*	4.9	9.3	
Nr. PLEURAE	10		10			11	11	11	10 left 11 right	
NUMBER OF RACHIAL RINGS	ca 22		25			23	26	24?	25	
TUBERCLES ON RINGS —	2, 3?, 5P, 6, 9, 10, ...		2, 5, 6P, 9, 14, ...			1, 3, 5?, 9, 14	3P, 5, 9, 14?	3, 5, the rachis damaged	3P, 3P? 5? (obscure)	
A										
P										
COMMENTS							faint pleural tubercles	last pleura very faint & small	teratogenic?	

ABBREVNS: ⊖ carapace, ⬭ cephalon, D librigena, ⬭ pygidium, △ cranidium, ▭ thorax; S steinkern, C cast; * estimated value; P partly testiferous; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis 74480101

CPC specimens'

18.11.1976

SPECIMEN NUMBER	CPC 18072 (B)	18073	18074	18075	18077	18078	18080	18081	18082	18083
preserved as —	△ c incompl.	▽ s	▽ s incompl.	△ s incompl.	▽ c incompl.	△ s incompl.	▽ s incompl.	▽ s	▽ s incompl.	△ s incompl.
A1	—			—		12.8				9.0
A9	—			—		—				—
A10	—			—		—				—
B	3.9			—		9.3				7.2
B1	4.6			—		10.5				7.9
C2	1.4			2.0		2.3				1.9
D10	1.0			2.0		2.9				2.4
I ▫J1	—			—		27.3 d				—
J2	—			9.8		11.6				8.4
J4	6.5 d			—		15.1				10.8 d
J6	1.8			4.4		4.8				3.5
K	—			—		6.2				—
K2	2.9			5.0		6.3				4.9
K'10	2.0			—		4.3				3.1
Q										
R										
R1										
W		10.7	13.7		14 *		17.2 d	8.7	13.5 d	
X		2.7	3.5		4.0		4.2	2.1	3.3 d	
Y1		6.2	8.3		8.6		10.5	5.5*	8.6	
Z		7.2	10.4		9.9		13 *	6.7	9.7	
Z1		6.7	9.7		9.4		12.5*	6.1	9.0	
Nr. PLEURAE		10	>9		11		10	11	11?	
NUMBER OF RACHIS ADM		24	23 to 26		27		24	28	24*	
TUBERCLES ON RACHIS —		1, 3, 4, 5?, 7, 8, 11?, 16 (mostly faint)	1P, 2?, 3P, 5, 9P, 13		3, 5P, 6, 10P, 11, 15		1, 2, 4P, 5, 9, 13, 15	3, 3P, 5, 9, 14	2P, 6P, 9, 12?, 16?	
A										
P										
COMMENTS										

ABBREVIUS: ⊖ complete △ cephalon D librigena ▽ pygidium S stratigraphy ☆ estimated value △ cranidium ▭ thorax C cast P partly tuberiferous d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis 74680 101

CPC specimens

19/11/1976

SPECIMEN NUMBER	CPC 18084	18085	18086	18090	18091	18092	18093	18094	18095	18096
preserved as —	▽ s incompl.	▽ c incompl.	△ s(P)	△ s incompl.	△ s incompl.	▽ s incompl.	▽ c incompl.	▽ c incompl.	△ s incompl.	▽ s
A1			9.5	12.1*	7.4				10*	
A9			—	—	—				—	
A10			22.4	—	—				—	
B			7.5	9.6*	6.0				7.8*	
B1			8.5	10.4*	6.7				8.8*	
C2			—	3.1	1.7				—	
D10			—	2.8	2.1				—	
I ▫J1			21.4	—	18.2 d				—	
J2			9.6	13.0	7.5				9.3	
J4			—	—	11.5 d				—	
J6			—	—	3.9				—	
K			5.0	5.6 d	—				—	
K2			5.0	7.1	4.0				5.2	
K'10			3.4	4.0 d	2.7				2.5	
Q										
R										
R1										
W	15.3 d	13.8 d				12.5 d	9.5 d	12.0 d		8.4
X	4.0	3.9				3.2	2.6	2.9		1.9
Y1	9.1	9.7				7.0	5.9	—		4.7
Z	10.1	11.0				8.1	6.8	—		5.6
Z1	9.6	10.6				7.5	6.5	—		5.2
Nr. PLEURAE	11	11				10?	11	>9		10
NUMBER OF RACHIAL RINGS	27	28				24	ca 25*	>21 (all faint)		21
TUBERCLES ON RINGS —	1, 2, 5, d, 9, 10, 14, 19, ...	2P, 3, 6, 7P, 8, 11, 20?				1?, 3, 4, 5P, 7, 8P, 11.	2, 3P, 4P?, 5, 6P, 9, 14	1P, 2P, 3P, 4P, 6, 7P, 8P, 13, 20		2, 5, 8?, 10?, ...
A										
P										
COMMENTS		low pleural tubercles								
ABBREVNS	⊖ compact	△ cephalon △ cranidium	D librigena ▫ thorax	▽ pygidium		S steinkern C cast	P partly tuberiferous d calculated from half-width		* estimated value	

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis 74480101

CPC specimens. 19/11/1976

SPECIMEN NUMBER	CPC 18097	18099	18100 (A)	18428	18429	18430	18431	18432	18433	18434
preserved as —	▽ s	△ s	△ c incompl.	△ c incompl.	△ c incompl.	△ c incompl.	▽ c incompl.	△ s incompl.	⌓ s incompl.	▽ s incompl.
A_1		10.0*	—	8.2	6.0*	6.9		9.8	—	
A_9		—	—	—	—	—		—	—	
A_{10}		—	—	—	12.5*	—		—	—	
B		7.6	—	6.1	4.5	5.0		7.4	7.1	
B_1		8.6	—	7.0	5.3	5.9		8.3	—	
C_2		2.1	2.4	1.9	—	1.6		—	—	
D_{10}		2.7	2.1	2.4	—	—		—	—	
I = J_1		23* d	25* d	—	13.5d	—		—	—	
J_2		10.6	—	8.6 d	—	7.0		10.4	9.3	
J_4		12.8	11.6	10.5 d	8.4	9.3		—	12.4	
J_6		4.2	3.4	3.1	2.0	2.6		—	—	
K		5.2	4.0*	4.3	3.0	3.6 d		4.1	—	
K_2		5.6	—	4.8	3.7	3.8		5.3	5.5	
K'_{10}		3.7	3.3*	3.4	2.5	2.9		3.1	3.5	
Q										
R										
R_1										
W	10.0						5.8 d			15.5*
X	2.7						1.8			4.3
Y_1	5.9						3.5			—
Z	6.7						4.5			—
Z_1	6.2						4.2			—
Nº PLEURAE	10						10 LEFT 9 RIGHT			11
NUMBER OF RACHIAL RINGS	24						22			27*
TUBERCLES ON RINGS —	2, 3?, 4?, 5, 9, 13?						3, 4?, 5, 6?, 10, 14, 18?			2?, 5, 6, 9, 10?, 12?, 13, 18
A										
P										
COMMENTS							teratogenic			

ABBREVNS: ⊖ carapace △ cephalon D librigena ▽ pygidium S steinkern * estimated value
△ cranidium ▭ thorax C cast P partly testiferous
d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis

7448 0101

CPC specimens

19/11/1976

SPECIMEN NUMBER	CPC 18435	18436	18437	18438	18439	18440	18441	18442	18444	18447
preserved as —	▽ s	△ c incompl.	▽ c incompl.	▽ c incompl.	▽ s	▽ c incompl.	▽ c incompl.	▽ s	▽ c incompl.	▽ c incompl.
A1		7.9								
A9		—								
A10		—								
B		6.0								
B1		7.1								
C2		2.0								
D10		—								
I = J1		—								
J2		8.4 d								
J4		—								
J6		2.6								
K		3.0*								
K2		4.5								
K'10		2.9								
Q										
R										
R1										
W	16.1		9.2 d	14*	15.8	13.0 d	13.0 d	12.5	16.0 d	ca 13*
X	—		2.8	4.3 d	4.5	3.6 d	3.8 d	3.4	4.3 d	3.8
Y1	10.5		—	8.3*	10.1	7.9	7.9	7.8	—	7.7
Z	12.2		—	—	12.0*	9.2	9.0	9.5	—	—
Z1	11.0		—	—	10.9	8.9	8.4	9.0	—	—
Nr. PLEURAE	10		>8	11?	10	11	11	11	>7	≥11
NUMBER OF RACHIAL RINGS	>22		>15	27	27	26	24	28	>14	27
TUBERCLES ON RINGS —	2, 3P?, 4, 5, 6, 9, ...		3, 4, 5, 7?, 9?, 13? (all faint)	2P, 3P, 4P, 5, 6P, 9, 10P, 13, 17	2, 3, 4, 5P, 6P, 7P, 11, ...	3P, 4P, 5, 6P, 9P, 10P, 15P	2P, 3P, 5+5P, 6+6P, 10, 14, 15P, 21	2, 5, 6, 10, 15, ...	2, 3, 5, 6P, 7P, 9, 10P, 12?, ...	2, 3P, 4, 6, 11P, 16, 20
A										
P										
COMMENTS						teratogenic		10th Heura fused as post-radial rib		
ABBREVIS	⊖ carapace	△ cephalon △ cranidium	D librigena ▭ thorax	▽ pygidium		S steinkern C cast	P partly testiferous d calculated from half-width		* estimated	value

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis 74480101

CPC specimens

19/11/1976

SPECIMEN NUMBER	CPC 18449	18450	18451	18454 (B)	18455	18456				
preserved as —	△ s incomplt.	△ s incomplt.	▽ s	△ c incomplt.	▽ s incomplt.	△ c incomplt.				
A_1	6.3	7.7*		10.3		—				
A_9	—	—		—		—				
A_{10}	—	—		—		—				
B	4.8	6.2*		8.0		7.6				
B_1	5.5	6.9*		8.8		—				
C_2	—	2.1		2.1		2.2				
D_{10}	—	2.6		2.0		1.9				
I or J_1	13* d	—		21.3 d		—				
J_2	6.2	8.3		10.2		9.8 d				
J_4	—	11.1 d		12.1		10.4 d				
J_6	—	3.5		3.2		2.4				
K	3.4 d	4.0 d		—		—				
K_2	3.6	4.6		5.4		5.2*				
K_{10}	2.5	3.0		—		—				
Q										
R										
R_1										
W			13.0		14.7					
X			3.5		4.2					
Y_1			7.1		—					
Z			8.2		—					
Z_1			7.7		—					
Nº PLEURAE			11		>7					
NUMBER OF RACHIAL RINGS			22		>13					
TUBERCLES ON RINGS —			1?, 5, 8P, 9, 13, 16		2P?, 5, 9, 13?					
A										
P										
COMMENTS										

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis

74480101

F-collection specimens

19/11/1976

SPECIMEN NUMBER	F 24411	24417	24425	24447	24458	24468	24508	24516	24518
preserved as —	▽ incomp. C	△ incomp. C	▽ incomp. C	▽ incomp.	△ incomp. S	▽ incomp. S	▽ incomp. S	▽ incomp. S	△ incomp. C
A1		—			8.7				7.2
A9		—			—				—
A10		—			—				—
B		6.2			6.6				5.5
B1		7.3			7.7				6.3
C2		2.2			1.8				1.7
D10		—			2.3				1.8
I ▫J1		—			—				—
J2		—			8.9				6.7
J4		12.8 d			11.3 d				10.2
J6		3.0			4.2				2.5
K		—			3.9				3.3
K2		4.8			5.0				3.7
K'10		3.4			2.7				2.8
Q									
R									
R1									
W	17.0 d		—	15.2 d		17.8 d	14.2 d	12.7 d	
X	3.0 d		4.0 d	3.9		4.0	3.4	3.0	
Y1	10.0		10.1	—		—	—	8.1*	
Z	—		11.3	—		—	—	—	
Z1	10.8		10.8	—		—	—	8.9*	
Nr. PLEURAE	11		11	>8		>7	>6	>9	
NUMBER OF RACHIS AND TUBERCLES ON RACHIS —	23*		25	>17		>15	>13	25	
	?		3, 3, 5, 8, 9, 10P, 13, 16 ..... (all faint)	3, 3P?, 5P, 6, 7P?, 10, 15		3, 3P, 5P, 6, 11, ...	3, 5, 9, ...	3P, 3, 4P, 6P, 10, 11P?, 14	
A									
P									
COMMENTS									

ABBREVNS: ⊖ carapace △ cephalon D librigenae ▽ pygidium △ cranidium ▫ thorax

S steinkern C cast P partly testiferous d calculated from half-width * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Curbis — locality 74480177

CPC specimens

Walker Veleonies (Canberra 1:250000 sheet)
19/11/1976

SPECIMEN NUMBER	CPC 18528 (B)	18529 (B)	18530	18531	18532	18533	18534	18535	18536	18538
preserved as —	△ s incompl.	▽ s	▽ s	△ c incompl.	△ s	▽ c incompl.	△ c incompl.	▽ c incompl.	△ c incompl.	△ c incompl.
A1	4.9			7.0*	7.7		8.7*		3.7	4.6*
A9	—			—	—		—		—	—
A10	—			—	16.8		17.7*		—	—
B	3.7			5.0	5.7		6.5		2.7	3.5
B1	4.0			6.0	6.5		7.5		3.1	4.0
C2	1.3			1.7	1.9		2.3		1.1	1.2
D10	1.0			1.3	2.2		2.0		0.9	1.0
I ≈J1	12.5 d			—	17.2		17.1		—	9.4 d
J2	4.7			6.9	7.9		8.6		3.4	3.9 d
J4	6.5			9.0	10.0		10.7 d		4.2	6.2 d
J6	1.9			2.2	3.2		2.7		1.3	1.9
K	2.3			4.2 d	3.9		5.0 d		1.4	2.1
K2	2.9			4.3	4.2		5.3		2.1	2.7 d
K'10	1.7			2.7	2.7		3.6		1.2	1.5
Q										
R										
R1										
W		10.9	6.4			5.2 d		15.8 d		
X		2.9	1.6			1.4		4.1 d		
Y1		6.9	3.4			—		10.0		
Z		8.3	4.3			—		11.6		
Z1		7.7	4.1			—		10.8		
Nr. PLEURAE		11	11			10		11		
NUMBER OF RACHIAL RINGS		24	26			23		25		
TUBERCLES ON RINGS—		2, 5, 9, 13p, 17, 21	4, 5, 9, 14, 16			?		3p, 4, 5p, 6, 7, 11, 12p, 13, 15, 19		
A										
P										
COMMENTS		11th pleura fused as post-rachial rib.						11th pleura fused as post-rachial rib		

ABBREVNS: ⊖ carapace; ⌂ cephalon; △ cranidium; D librigena; ▭ thorax; ▽ pygidium; S steinkern; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis — 7448 0177

CPC specimens — 22/11/1976

SPECIMEN NUMBER	CPC 18539	18540	18541	18544	18545	18546	18547	18548	18549	18550
preserved as —	▽ c	△ s incompl.	△ s	▽ c incompl.	▽ s	△ s incompl.	▽ c incompl.	▽ s	△ s incompl.	▽ c incompl.
A1		8.5	7.5			2.9			1.5	
A9		—	—			—			—	
A10		—	16.0			—			—	
B		6.3	5.2			2.3			1.3	
B1		7.2	6.0			2.7			1.4	
C2		1.8*	1.6			0.7			—	
D10		2.1*	1.6			1.0			0.6	
I = J1		23* d	14.6			6.2 d			—	
J2		8.3	6.8			3.0			2.0*	
J4		9.7	8.6			4.0 d			2.0	
J6		3.1	2.7			1.1			0.5*	
K		4.1	3.2			1.2 d			0.8	
K2		4.8	3.6			1.7			1.1	
K'10		2.7	2.2			0.9 d			0.6	
Q										
R										
R1										
W	5.7			14.3 d	6.3		8.4 d	9.9		15.5 d
X	1.5			3.4	1.5		2.4*	2.4		3.8 r
Y1	3.3			8.1	3.3		5.0	5.6		9.4
Z	4.0*			9.9	4.2		6.4	6.8		11.8
Z1	3.8			9.4	3.9		5.9	6.3		11.0
Nr. PLEURAE	12			11	10		11	10		11
NUMBER OF RACHIAL RINGS	26			24	20		23	21*		26
TUBERCLES ON RINGS — A	3, 4, 5, 7P, 9P, 15 (mostly very faint)			3, 4(P), 5(P), 6, 7(P), 8(P), 10, 11P, 12(P)?, 17, 22 (all very faint)	3, 4, 8P, 12 (then obscure)		2P, 3, 6, 7P, 10, 14, 18	2, 4P, 5, 6(P)?, 10, 12		2P, 4P, 5P, 6P, 7, 8P, 9, 11, 12P, 17?, - (mostly faint)
P										
COMMENTS	12th pleura fused as post-radial rib.			11th pleura fused as post-radial rib.			11th pleura fused as post-radial rib.			11th pleura fused as post-radial rib.
ABBREVS	⊖ compact	⬭ cephalon △ conidium	D librigene ▭ thorax	▽ pygidium	S stratiform C cast		P partly testiferous		* estimated value	d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis 74480177

CPC specimens

22/11/1976

SPECIMEN NUMBER	CPC 18553	18554	18556	18557	18558	18559	18561	18562	18563	18564
preserved as —	△ s incompl.	△ s incompl.	▽ s	▽ s	△ s incompl. (see below)	▽ s	▽ c incompl.	▽ c incompl.	△ c incompl.	▽ s
A1	7.2*	—			2.1?				7.7	
A9	—	—			—				—	
A10	—	—			—				15.1	
B	5.6	5.8*			1.6				5.7	
B1	6.3*	—			1.9				6.7	
C2	1.7	1.8			—				2.1	
D10	2.0	—			0.5				1.4	
I ▫J1	—	—			6.6				21.2d	
J2	7.4	8.5			2.5				7.9	
J4	9.8	10.7			3.4				10.4d	
J6	3.1	3.3			1.1				3.1	
K	—	—			1.0				4.2d	
K2	3.8	4.3			1.6				5.4d	
K'10	2.7	2.6			0.7				3.5d	
Q										
R										
R1										
W			12.1d	12.5d		13.4	3.7d	11.5*		19.8
X			2.9	3.0		3.4	0.9	3.3d		5.4
Y1			6.7	6.5		8.1	2.0	7.0		12.7
Z			8.1	7.7*		—	2.5	8.4		15.4
Z1			7.5	7.3*		8.6	2.4	7.9		14.2
Nr. PLEURAE			10	11		10	11	10		11
NUMBER OF RADIAL AND			26	22*		24	23	27*		26
TUBERCLES ON RINGS —			2, 4P, then obscure	1P?, 2P, 6, 7P, 8P, 10, 14.		2, 5P, 6P, 8P, 10, 11, 13, 15?, 16	2, 3, 5, 6P, 7, 10	2, 3P, 5, 6P, 8, 10, 13, 15, 17?		2P?, 3, 6, 7, 9, 11P, 13P, 15
A										
P										
COMMENTS				11th pleura fused as post-radial rib.	Specimen may be flattened in front, ∴ A1 too short?					11th pleura fused as post-radial rib.

ABBREVNS: ⊖ carapace △ cephalon ▫ cranidium ▫ librigena ▫ hypostome ▽ pygidium S steinkern C cast P partly tuberiferous d calculated from half-width * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis 7448 0177

CPC specimens

HOLOTYPE

22/11/1976

SPECIMEN NUMBER	CPC 18565	18567	18568	18569	18570	18572	18573	18574	18577	18578
preserved as —	c incompl.	c incompl.	s	c incompl.	s incompl.	c incompl.	s incompl.	c incompl.	c incompl.	c incompl.
A_1			3.3		3.5	8.0	9.2*			
A_9			—		—	—	—			
A_{10}			8.5		—	—	—			
B			2.7		2.8	6.0	6.8			
B_1			3.0		3.1	6.7	8.1*			
C_2			0.9		1.0	1.9	1.7			
D_{10}			1.1		1.0	1.6	1.9			
I ∘ J_1			7.3		7.5*	19.0 d	18* d			
J_2			3.3		3.3	8.3	8.9			
J_4			4.4		4.1	9.8	11.3			
J_6			1.3		1.3	3.0	3.6			
K			1.2		1.3	4.4	4.2*			
K_2			2.0		1.9	4.9	4.6			
K'_{10}			0.9		1.1	3.1	2.9			
Q										
R									14.3 d	
R_1									4.1	
W	5.5* d	8.7 d		11.0 d				14.0*	12.4 d	5.6 d
X	1.6	2.3		3.1				3.8	3.1	1.5
Y_1	3.3	4.5		6.7				7.9	6.6	3.3
Z	4.0	5.9		8.1				9.8	—	4.0
Z_1	3.7	5.4		7.5				9.2	7.5	3.8
Nº PLEURAE	11	10		10				11	11?	11
NUMBER OF RACHIAL RIBS	25	23		24				24	21	23
TUBERCLES ON RIBS —	2, 6, 10P, 11	3, 8, 11P, 13		3P, 4, 5P, 6, 7, 11?, 16? (all faint, 3, 5 & 6 only visible externally)				3P, 4P?, 5, 6, 9, 16P	3?, 3, 4P?, 5, 8P, 9, 12, 13P?, 17	3, 3P, 7, 11, 12, 15?
A										
P										
COMMENTS								11th pleura fused as post-radial rib		11th pleura fused as post-radial rib

ABBREVIS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; S steinkern; C cast; △ cranidium; ▭ thorax; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis

7448 0177

CPC & F specimens

22/11/1976

SPECIMEN NUMBER	CPC 18580	18581	18582	18583	18584	18586	F24622	F24638 (B)	F24651	F24662
preserved as —	△ s incompl.	⊖ c incompl.	▽ c incompl.	△ s incompl.	▽ c incompl.	▽ c incompl.	▽ c incompl.	▽ c incompl.	△ s incompl.	▽ c incompl.
A1	4.9	3.0		8.0			identity uncertain	identity uncertain	7.3	
A9	—	—		—					—	
A10	—	—		—					—	
B	3.6	2.2		6.0					5.5	
B1	4.2	2.5		6.9					6.3	
C2	1.2	0.7		1.4					1.8	
D10	1.2	0.6		1.9					—	
I ∘J1	11.0*	7.0 d		18.0 d*					—	
J2	4.4	3.2 d		8.4					6.5	
J4	6.0	3.6		9.7					7.6*	
J6	1.9	1.1		3.1					2.6	
K	2.5	1.4		4.1					2.8	
K2	2.6	1.7		4.5					3.5	
K'10	1.8	1.3		2.7					2.0	
Q		—								
R		4.4 d								
R1		1.4 d								
W		3.8 d	15.2 d		13.0 d	6.7 d	10.0	8.9 d		11.8
X		1.1	4.2 d		3.4	1.9	2.6 d	2.7 d		3.4
Y1		1.8*	8.6		6.8	3.6	6.2	5.2		—
Z		—	—		—	4.5	6.8	5.9		—
Z1		—	—		—	4.3	6.5	5.6		—
Nº PLEURAE		>9	10 or 11		>9	12	12	12		>7
NUMBER OF RACHIAL RIBS		>19	25		>20	26	26	27		>16
TUBERCLES ON RIBS —		2pp, 5, 8p, 9, 13, 15?, 17?, (all faint)	2p, 3p, 4p, 5p, 7, 9p, 13, 15?, 17		1p, 2, 3+3r, 4+4(p), 5+5(p), 6, 8p, 10, 11, 12, 14, 19,	2, 3p, 6pp, 8p, 10p, 12		2, 4, 7p, 8, 10, 13, 15p, 17 (all faint)		1?, 4p, 5p, 8, 12, 15,
A										
P										
COMMENTS						12th pleura fused as post-rachial rib		12th pleura fused as post-rachial rib.		
ABBREVNS	⊖ compressed	△ cephalon △ cranidium	D librigena ▭ thorax	▽ pygidium	S stainkorn C cast	P partly testiferous d calculated from half-width			* estimated value	

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis — locality 7448 0285

Walker Volcanics (Canberra 1:250 000 sheet)

CPC specimens

22/11/1976

SPECIMEN NUMBER	CPC Ⓐ 18594	Ⓒ 18594	18595	18596	18597					
preserved as —	△ c incompl.	△ s incompl.	△ s incompl.	▽ s incompl.	▽ s incompl.					
A1	—	10.9	7.1							
A9	—	—	—							
A10	—	—	—							
B	8.1	8.5	5.8							
B1	9.4	9.4	6.4							
C2	2.3	2.0	1.5							
D10	2.5	2.9	2.0							
I - J1	20.0* d	19.5 d	12.5*							
J2	9.2* d	9.8	6.6							
J4	11.6	12.1	9.5* d							
J6	3.9	4.0	2.6							
K	—	4.4	3.3							
K2	5.3	4.9	4.0							
K'10	3.4	3.0	2.3							
Q										
R										
R1										
W				17.2 d	16.5 d					
X				4.1	4.2					
Y1				10*	9.3					
Z				—	—					
Z1				10.4	—					
Nº PLEURAE				11?	11					
NUMBER OF RACHIAL OR TUBERCLES ON RING —				>17 2, 3P, 5, 6P, 7, 8, 10, ...	25 & 27 3?, 3?, 4?, 5, 9, 13 (damaged)					
A										
P										
COMMENTS					11th pleura fused as post-rachial rib.					

ABBREVNS: ⊖ carapace △ cephalon △ crenidium D librigena ▽ pygidium ▭ thorax S steinkern C cast P partly testiferous d calculated from half-width ☆ estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

C. urbis — Wombat Creek, Victoria

~Cowombat Fm.

22/11/1976

SPECIMEN NUMBER preserved as —	HMP 1241 △ S incompl.									
A1	9.6									
A9	—									
A10	—									
B	7.8									
B1	8.5									
C2	3.3									
D10	2.1									
I - J1	—									
J2	10.6									
J4	13.4									
J6	3.6									
K	5.7									
K2	6.0									
K'10	4.0									
Q										
R										
R1										
W										
X										
Y1										
Z										
Z1										
Nr. PLEURAE NUMBER OF RACHIAL RING TUBERCLES ON RINGS —										
A										
P										
COMMENTS	measured from photograph (scaled)									

ABBREVNS: ⬭ carapace; ⬭ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; ☆ estimated value; d calculated from half-width

Coronocephalus urbis: hypostome proportions.

Locality 74480101 CPC	18050	18068	18088	18089
hypostome length (sag.)	7.6*	8.1	9.2	–
length to anterior wings (exsag.)	3.4*	3.1	3.3	3.1
length to maculae (exsag.)	5.0*	5.5	5.6	5.1
length over median body (sag.)	6.1*	6.5	6.9	6.7
width (over anterior wings)	8.4	9.7	9.7d	9.5*
width of median body	4.1	5.0	5.0d	4.9

*estimated value; d: value obtained by doubling half-width.

(all dimensions in millimetres.

Locality 74480177 CPC	1[illegible]37	18542	18543	18566	18570
hypostome length (sag.)	5.0*	4.2	6.7*	7.6	7.0*
length to anterior wings (exsag.)	1.7	1.4	[illegible]	[illegible].7	[illegible].6
length to maculae (exsag.)	3.5	2.5	[illegible]	4.[illegible]	4.2
length over median body (sag.)	[illegible]	[illegible]	[illegible]*	5.0	5.3
width (over anterior wings)	5.[illegible]	4.2*	7.[illegible]	[illegible].5*	7.0
width of median body	[illegible].8	[illegible]	[illegible]	[illegible]	3.6

DATA SHEET — ENCRINURID MEASUREMENTS

17.11.1976

Coronocephalus sp. cf. *urbis* — locality 7448 0051
(Canberra 1:250000 Sheet)

SPECIMEN NUMBER preserved as —	CPC 18031 ⊖ c distorted									
A1	4.0									
A9	—									
A10	8.2									
B	2.7									
B1	3.3									
C2	1.1									
D10	0.9									
I = J1	ca 15 d*									
J2	3.9									
J4	5.6									
J6	1.2									
K	2.9									
K2	3.0									
K'10	2.2									
Q										
R										
R1										
W										
X										
Y1										
Z										
Z1										
Nr. PLEURAE										
NUMBER OF RACHIAL RINGS										
TUBERCLES ON RINGS —										
A										
P										
COMMENTS										

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; * estimated value; P partly testiferous; d calculated from half-width

Holotype [BM(NH)] + Australian Museum specimens

Encrinurus mitchelli Foerste

SPECIMEN NUMBER	TYPE In 27608	AMF 2479 A	2479 B	2481	3213	3215	21242	25270	25272	25274
preserved as —	s	c	s (damaged)	s	s	s	s	c	s	s
A1	9.1	9.9	7.6	8.3*	6.9		6.1			4.9
A9	—	—	—	—	—		—			5.0
A10	10.3*	12.8	9.0*	—	8.0		6.8			4.5
B	7.0*	7.5	6.0	—	5.6		4.6			—
B1	8.5*	9.5	7.2	—	6.5		5.6			—
C2	2.5	3.0	—	—	2.2*		1.7			1.4
D10	2.0	2.3	2.3*	—	2.1		1.6			1.0
I = J1	20.2	22.0	19.0*	—	19.2		13.5			9.0
J2	7.0*	7.8	6.8*	—	5.6		4.7			3.5*
J4	—	—	—	—	—		—			—
J6	1.5	1.5	2.0*	—	1.6		1.1			1.1
K	5.2	5.6	4.4	—	3.4		3.3			2.0
K2	5.4	6.1	5.2*	—	4.0		3.9			—
K'10	4.3	4.3	3.7	—	2.5		2.5			—
Q	13.7	11.2*		13.4	11.1		8.8	—		5.6
R	18.9	20.7		17.9	15.6		12.8	23.3		7.9
R1	5.5	6.1		4.9	4.0		3.8	6.7		2.2
W	14.2*	17.9		13.0		16.0*	9.4	19.4	13.5	6.0
X	3.3	4.1		2.8		4.4	2.6	4.6	3.4	1.6
Y1	9.1	10.5*		—		—	7.0	—	9.5	4.4
Z	—	14.0*		9.5		14.7	7.5	14.3	11.0	5.0
Z1	10.0*	>11.7		—		—	7.2	—	10.2	4.6
Nr. PLEURAE	11 or 12	11?		12		12	11?	11	12	11
NUMBER OF RACHIAL RINGS	25?	26		25*		≥23	23	>22	39	21
TUBERCLES ON RINGS —	3 4 8 12 16?	4 7 8 12 16		4? 5 8 12 16 17 21 22?		3 7 8 11 15 19	3 7 11 15 19	3 8 then obscure	4 7 8 12 16 20 25	3 6 9 14 18?
A										4.6
P				>31.2						14.8
COMMENTS	in Brit. Mus. (Nat. Hist.) Holotype	1893 colln. Bowning	1893 colln. Bowning	1893 colln. Bowning	T.W.E. David coll. Hartons Corner Yass R., Yass.	as ↑	Mr. Engelhardt 1928 Bowning	Mitchell colln. Bowning	Mitchell colln. Bowning	Mitchell colln. Bowning

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; △ cremidium; ▭ thorax; ▽ pygidium; S steinkern; C cast; * estimated value; P partly testiferous; d calculated from half-width

Australian Museum specimens

Encrinurus mitchelli : Mitchell collection, Bowning area

SPECIMEN NUMBER	AMF 25275	25278	25280	25283	25284	25285A	25285B	25287	25293	25296
preserved as —	s	s	s	s (flexed)	c	c	c	s (damaged)	s	s (poor)
A1	10.5	6.7	6.6	5.9		—	9.5	—	4.1	4.7
A9	—	—	—	6.7		—	—	—	4.7	—
A10	12.0	7.6	8.9	6.2		—	11.6	—	4.3	—
B	8.3	5.3	5.0	4.3		—	7.5	—	3.4	3.7*
B1	9.8	6.2	6.1	5.4		—	9.1	—	4.0	4.2
C2	2.2	1.5	—	1.2		2.1	2.1	—	1.1	—
D10	2.7	1.9	1.9	1.6		2.5	2.3	—	0.9	—
I =J1	24.0	17.4*	17.0	12.0		22.9	20.5*	7.5	10.0*	—
J2	9.0*	6.1	6.0	4.5		8.2*	7.7	—	3.4	3.9*
J4	—	—	—	—		—	—	—	—	—
J6	1.9	1.2	1.7	1.0		1.8	1.7	—	0.7	—
K	5.7	3.9	4.1	2.8		6.5	5.0	—	2.3	—
K2	7.0	5.1	—	3.4		7.2	6.4	—	2.7	2.9
K'10	4.7	3.2	—	2.2		5.4	4.2	—	2.0	1.9
Q	18.3	—	10.9	—		15.5	14.5	—		6.0
R	23.8	16.2	16.5	17.6		21.7	20.0*	—		8.9
R1	6.2	4.6	4.8	3.5		6.5	5.5	—		2.4
W	16.2		13.0*	—	6.7*	16.5		4.8		7.2
X	4.4		3.3	2.0	2.0	4.4		1.2		1.8
Y1	—		8.8	6.9	—	13.0		—		—
Z	—		10.7	7.9	4.8*	15.1*		3.4		—
Z1	—		10.0	7.4	—	14.5		—		—
Nr. PLEURAE	?		11	11?	9	12		10		
NUMBER OF RACHIAL RINGS	?		28	29	>18	29		>16		
TUBERCLES ON RINGS —	4, 7 (damaged)		4 7 11 15 16 20 25?	3 5 8 12 17 22 26	?	3 4 7 12 16 21 25? 27?		4 8 13 14?		1? 4 7 11 15 16
A								4.5	4.5	
P								12*		
COMMENTS										

ABBREVNS: carapace; cephalon; D librigena; pygidium; S steinkern; C cast; P partly testiferous; d calculated from half-width; △ cranidium; ▭ thorax; * estimated value.

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens

Encrinurus mitchelli : Mitchell collection, Bowning area

SPECIMEN NUMBER	AMF 25297	25299	25300	25303	25305	25306A	25307	25308	25309	25334
preserved as —	▽ s	⊖ s	⊖ s	⊖ s (fragm)	⊖ s (fragm)	⊖ s (fragm)	⊖ c (fragm)	⊖	⊖	⊖ s
A_1		—	—	—		9.1		8.8*		6.1
A_9		—	—	—		—		—		—
A_{10}		—	9.2	6.2		10.8		10.8*		8.1
B		—	—	—		7.1		6.7		5.0
B_1		—	—	—		8.2		8.1		5.8
C_2		—	—	—		2.4		1.9		1.3
D_{10}		1.0	—	—		2.1		2.0		1.8
I = J_1		9.5?	16.9	13.5		19.2		19.5*		15.5
J_2		3.0	—	—		6.2		6.7		5.3*
J_4		—	—	—		—		—		—
J_6		0.9	—	—		1.5		1.5		1.3
K		2.5	—	—		4.3		4.8		3.6
K_2		2.8	—	—		4.9		5.3		4.0
K'_{10}		2.1	—	—		3.5		4.2		3.0
Q		6.9	11.7*	8.1		—		13.0	12.5*	10.5
R		9.9?	15.4	12.2		18.5*		17.8	14.5*	15.5
R_1		2.9	4.7	3.8		5.0		5.5	4.9	4.0
W	13.7	6.8	12.4	9.5	8.3		21.0*	13.0		11.3
X	3.1	1.8	3.1	2.4	2.4		4.8	3.5		3.1
Y_1	—	4.7	8.8	—	—		—	9.2*		8.5
Z	10.5	5.4	9.5	7.4	5.6		14.8*	10.5*		9.4
Z_1	—	5.2	9.0	—	—		—	10.0*		9.0
Nr. PLEURAE	11	11	11	11?	11?		12	11		11
NUMBER OF RACHIAL RINGS	>27	29	29	>19	>24		30?	28		28
TUBERCLES ON RINGS —	1 6 9 14 16 18 24?	1 4 8 12 17 22	4 7 8 12 16 21 26?	1? 5? 7 11	4 8? 11 16 20			4 8 12 16 21 25?		4 7 12 16 17 21
A										
P			22.8*							
COMMENTS	3.7 mm high					old no. 132	Limestone Creek	old no. 178		

ABBREVNS: ⊖ carapace; ⌓ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens

Encrinurus mitchelli : Mitchell collection, Bowning area

SPECIMEN NUMBER	AMF 25342	25344	25346	25348	25349 (COUNTERPARTS)	25353	25381	25383	25385	25386
preserved as —	⌓ s	⊖	⌓ s	⌓ s	= 26978 (= 25353) ⊖ c	(= 25349) ⊖ s	⊖ c	⊖ s (poor)	⌓ c	⊖ s
A_1	9.5	8.9*	9.3	8.2	5.5	5.4			—	7.7
A_9	10.9*	—	—	—	7.4	6.8			—	—
A_{10}	10.6	12.0*	12.5*	9.2*	6.7	6.4			—	9.1
B	7.2	6.5*	7.5	6.3	4.1	4.3			—	6.1
B_1	8.9	8.0*	8.7	7.8	5.1	5.0			—	7.2
C_2	2.4	2.3	—	2.1	1.7	1.6			2.3	2.0
D_{10}	2.4	2.4	—	2.2	1.2	1.3			2.6	2.0
I = J_1	19.3*	20.7	21.5*	—	14.0*	14.2			21.0*	18.4
J_2	7.0	7.0*	7.0*	6.1	4.4	4.6			—	5.9
J_4	—	—	—	—	—	—			—	—
J_6	1.5	1.2	—	1.4	0.6	0.9			1.6	1.5
K	4.6	5.3	5.5	4.4	3.5	3.2			5.7	4.1
K_2	5.7	5.9	—	5.0	3.6	3.6			—	4.9
K'_{10}	3.8	4.4	4.5*	3.9	2.6	2.5			4.3	3.4
Q		13.2	14.7		8.9	9.3	14.2		11.7	12.9
R		20.1	21.0		13.5	13.3	21.0*		19.6	18.2
R_1		6.4	5.9		3.8	3.5	7.0		5.9	4.7
W		15.7	15.6		—	9.5	15.3	14.0*	16.0	12.9
X		4.1	3.5		2.3	2.2	4.0	3.3	3.5	2.8
Y_1		11.5	11.9		—	6.1	—	—	10.6	7.9
Z		13.9	13.5		—	6.8	13.2	11.8	13.1	9.5
Z_1		13.2	12.4		—	6.4	—	—	12.5	8.5
Nr. PLEURAE		11	11		—	10	10?	12	12	11
NUMBER OF RACHIAL RINGS		31	25		—	24	29	≥28?	31	25
TUBERCLES ON RINGS —		1? 4 8 12 16 17 21 26	2 3 6 9 13 18 22			3 7 10 14 16 19	4 8? 10? 14? 20? 24?	3? 4 8 9 12 13	3 4 7 11 16 19 23 27?	3 4 7 11 12 16
A	9.8			9.1	6.2	5.8				
P						21.5	>37.5			
COMMENTS		dd nr. 116	dd nr. 117	dd nr. 113	counterparts					

ABBREVNS: ⊖ carapace; ⌓ cephalon; D librigena; ⌔ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens

Encrinurus mitchelli : Mitchell collection, Bowning area.

SPECIMEN NUMBER	AMF 25389	25390	25392	25393	25776	25923	26196A	26198	26199	26200
preserved as —	△ s	⊖ s	⊖ s	△ s (damaged)	⊖	⊖ c	⊖ s	⊖ s (damaged)	⊖ s	⊖ (damaged)
A1	4.8			—			—		10.4	
A9	5.8			—			—		—	
A10	5.6			—			12.3		13.1	
B	3.6			8.0			—		8.2	
B1	4.4			—			—		9.6	
C2	1.2			2.2			2.3		2.7	
D10	1.2			2.4			2.8		2.3	
I = J1	10.0*			—			21.9		23.0	
J2	3.6*			8.2			7.1		7.9	
J4	—			—			—			
J6	0.7			1.5			—		2.2	
K	2.0			—			—		5.5	
K2	2.9*			6.6			5.5*		6.2	
K'10	1.9			4.7			—		4.5	
Q		10.9			11.8		16.9		—	17.3
R		19.5*			14.0		20.7		—	27.2
R1		—			4.2		5.9		6.3	—
W		14.2	17.6		11.1	7.9*		19.3*		
X		4.4	3.8		2.4	2.2		4.6		
Y1		—	—		—	—		—		
Z		9.6	13.3		7.5*	5.7		16.2		
Z1		—	—		—	—		—		
Nr. PLEURAE		11	12		11?	11		11		
NUMBER OF RACHIAL RINGS		>22	25*		25*	>27		28*		
TUBERCLES ON RINGS —		4 8 12 16 20			4 8 12 17 21?	3 6 7 11 16 20		4 5? 7 11 13? 18		
A	5.0	—								
P	—	28.5*								42*
COMMENTS					dd nr. 8	pygidium ca 1.9 mm high				

ABBREVNS. ⊖ carapace △ cephalon ▭ cremidium ▭ thorax D librigena ⊖ pygidium S steinkern C cast P partly testiferous d calculated from half-width * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens

Encrinurus mitchelli — Mitchell collection, Bowning district.

SPECIMEN NUMBER	AMF 26201	26202	26204	26205	26207	26209	26212	26213	26214	26379
preserved as —	s (drawing)	s	s	c	c	s	s	s	s	s
A_1				7.7*	10.2			4.8		—
A_9				—	—			—		—
A_{10}				—	11.5			5.5*		—
B				—	7.8			—		—
B_1				—	9.4			—		—
C_2				—	2.8			—		1.3
D_{10}				—	2.4			—		1.8
I = J_1				20.5	23.8			—		—
J_2				—	7.9			2.6		5.2*
J_4				—	—			—		—
J_6				—	1.6			—		1.3
K				—	6.4			—		3.5
K_2				—	6.6			—		4.3
K'_{10}				—	5.0			—		2.8
Q	12.8*			13.2	—	15.2	14.2	6.5		—
R	18.3			18.0*	22.2	20.4	17.5*	9.5*		—
R_1	5.2			6.4	6.9	6.6	4.6	2.7		3.8
W		17.5	16.6			16.5*	—	6.5*	6.6	
X		4.3	3.6			4.7	2.6	—	1.9	
Y_1		—	—			—	—	—	—	
Z		12.3	14.2			12.0*	—	4.0*	4.8*	
Z_1		—	—			—	—	—	—	
Nr. PLEURAE		10?	11 or 12			≥10	—	—	12	
NUMBER OF RACHIAL RINGS		>21	>22			20?	—	—	?	
TUBERCLES ON RINGS —			3 4 8 12 16 21?			3 6 7 11 15	3 4 5 6 8	4 8? 12? ...?	4 8 ..?	
A										
P										
COMMENTS									1.7* mm high	

ABBREVNS: carapace; cephalon; D librigena; pygidium; cranidium; thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens

Encrinurus mitchelli — Mitchell collection, Bowning district.

SPECIMEN NUMBER	AMF 26380	26381	27019	27151	27445	27446A	27446B	27447	27452	27457
preserved as —	c	s (damaged)	c	s	s	s	s	s (damaged)	s (frag.)	s
A1	4.9				6.9	7.7		7.4		
A9	—				—	—		—		
A10	5.7				8.5	10.0		8.7*		
B	3.7				5.3	5.9		—		
B1	4.6				6.5	7.0		—		
C2	1.4				1.7	2.3		—		
D10	1.2				2.1	2.2		—		
I = J1	9.5*				17.3	18.9		15.2*		
J2	3.9				6.2	6.3		—		
J4	—				—	—		—		
J6	0.8				1.3	1.6		—		
K	2.7				4.1	4.6		—		
K2	3.0				4.8	5.3		—		
K'10	2.2				3.3	4.3		—		
Q	7.1	12.6			—	—		10.2	4.2	
R	9.5	—			16.6	17.5		15.3*	5.0	
R1	2.7	5.0			4.5	4.8		4.2	1.5	
W	7.4*	15.0*	17.0*	21.9		18.4			—	8.1
X	1.9	3.2	3.9*	3.1		4.1			—	2.0
Y1	5.4	—	11.7	—		—			—	—
Z	6.9	11.1	13.2	—		—			—	6.5
Z1	6.6	—	13.0	19.0		—			—	—
Nr. PLEURAE	11	10	11	12		—			9	11
NUMBER OF RACHIAL RINGS	27	>20	30	23		—			15*	>22
TUBERCLES ON RINGS —	3 6 10 15 20? 26? 26?	3 6 9 10 14 ...	4 7 11 15 19 24 27	4 8 12 16		4 7 11 ...			none	4 7 11 15 19
A										
P								26.0*		
COMMENTS										1.7 mm high

ABBREVNS: carapace; cephalon; D librigena; pygidium; cranidium; thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens

Encrinurus mitchelli: Mitchell collection, Bowning district.

SPECIMEN NUMBER	AMF 27459	27461	27462	27464	27466	27468	27469A	27469B	27471	27472A
preserved as —	s	s	s (damaged)	s (poor)	s	c	c	c (damaged)	s	s
A1	6.1				1.7					4.7
A9					—					—
A10					2.0					6.6
B					1.3					3.5
B1					1.5					4.2
C2					—					1.2*
D10					0.5					1.3
I = J1	11.9				4.1					10.5
J2					1.4					3.6
J4					—					—
J6					0.4					0.8
K					1.1					2.3
K2					1.2					2.9
K'10					0.9					2.0
Q	8.1		15.5		2.7	—		9.7		—
R	11.1		22.4		3.9	12.2		12.7		9.5
R1	3.4		6.9		1.0	3.3		4.6		2.6
W	8.1	17.0*	16.1*	3.6	2.2	9.0*	16.0	11.3	17.9	
X	2.1	4.2	3.5	0.9	0.7	2.3	4.2	—	—	
Y1	—	—	—	—	1.2	—	—	—	—	
Z	7.0	12.6	14.0*	2.5	1.6	7.2	14.8	7.0*	14.7	
Z1	—	—	—	—	1.4	—	—	—	—	
Nr. PLEURAE	11	9	11 or 12	10	9	11	13	—	9	
NUMBER OF RACHIAL RING	23 or 24?	21?	>23	18	14	30	30	—	>20	
TUBERCLES ON RINGS —	4 5 9 13 18 21?	4 7 10? 11?	4 8 12 16 17 21	8 13 17	3 6 10 13	4 7 11 15 18?	4 8 12 16 20 24?	4 7 11? 15?	5 8 13 18	
A										
P	22*				>6			23*		
COMMENTS	1.9 mm high		4.5* mm high							

ABBREVNS: carapace; cephalon; D librigana; pygidium; cranidium; thorax; S steinkern; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens

Encrinurus mitchelli — Mitchell collection, Bowning area.

SPECIMEN NUMBER	AMF 27492	27494	27499	27501	27725	27839	27840	27841	28120	28142
preserved as —	⊖ s	⊖ p	⊖ s	⊖ (damaged) s	⊖ s	⊖ s	⊖ s	△ s	⊖ s	⊖ s
A1			—					—		5.9
A9			—					—		—
A10			—					—		—
B			6.5*					—		—
B1			7.4*					—		—
C2			—					1.6		—
D10			—					1.9		—
I = J1			18.0					19.4		10.0*
J2			6.3*					7.0		—
J4			—					—		—
J6			—					1.4		—
K			4.4					4.5		—
K2			5.3					5.6		—
K'10			3.5					3.9		—
Q		13.4*	12.7							7.1
R		17.6*	16.7	20.0*						9.0
R1		6.0	4.9	5.8						2.5
W	17.8*		12.8	18.5*	16.0	17.1	10.3	20.9		7.0
X	4.3		3.0	3.9	3.8	4.1	2.1	6.1		1.8
Y1	10.9		9.4	—	11.2	—	—	16.9		—
Z	14.4		10.3*	—	12.6	12.0	7.1	18.4		5.8
Z1	13.9		9.9	—	11.4	—	—	17.1		—
Nr. PLEURAE	11		11		11	12	12	12		11
NUMBER OF RACHIAL RINGS	28		29		25	29	30 or 31	31		21
TUBERCLES ON RINGS —	3? 7 11 15 20		1 4 7 11 16 21	7?	3 6? 10 14 19?	3 5 7 11 15 16 20	3 6 10 15 19 24 28?	3 5 8 12 17 23		3 7 11 12 16
A										
P										19*
COMMENTS					dd no. 117	3.8 mm high	2.3 mm high			

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens including Mitchell collection, Bowning area

Encrinurus mitchelli

SPECIMEN NUMBER	AMF 28143	28154A	28154B	28154E	28165	28519A	29054	31133	36103	36631
preserved as —	carapace s	carapace c	carapace c	cranidium s	pygidium s	carapace s	carapace c	carapace	pygidium c	carapace s
A1		—	—	9.6		3.6	—	7.5		
A9		—	—	—		—	—	—		
A10		—	—	12.6		3.9	—	9.5		
B		7.5	—	7.5		2.8	—	5.6		
B1		8.9	—	8.8		3.3	—	7.0		
C2		2.4	2.4	2.2		1.0	0.5	1.8		
D10		2.5	2.3	2.6		1.0	0.8	2.0		
I = J1		23.6	21.5	21.7		8.4	6.0*	18.7		
J2		8.0*	—	7.5		3.2	—	6.2		
J4		—	—	—		—	—	—		
J6		1.8	1.7	1.7		0.6	0.7	1.5		
K		5.8	6.1	5.0		2.0	1.7	4.2		
K2		6.5	6.1	6.2		2.5	2.1	4.8		
K'10		4.7	4.8	4.2		1.7	1.4	3.4*		
Q	—	14.5	14.7			6.5*	4.5	—	—	
R	14.3	21.5	—			7.6	5.4	—	11.0	
R1	3.9	6.7	6.7			2.2	1.7	5.0	3.4	
W	10.5	14.9*	18.6*		8.9		3.5		8.5	8.8
X	2.7	4.7	—		2.3		1.1		1.9	2.3
Y1	7.6	—	10.1		6.5		2.4		—	7.0
Z	8.6	—	12.5		8.0		2.7		6.7	8.7
Z1	7.8	—	11.9		7.5		2.5		—	8.1
Nr. PLEURAE	11	11?	11?		10		11?		12	11
NUMBER OF RACHIAL RINGS	27?	33 or 34*	26?		24 or 25		20*		>23	>20
TUBERCLES ON RINGS —	2 5 6 9 13? 18 21? 24?	4 7 11 16 21	4 5 7 11 15 18/19 22/23		3 7 11 15 20		4 8 13 17 ...		3 4 6 7 12?	4 7 12? 14?
A										ex BMR Inverlitch 2969 01 01
P										
COMMENTS	was identified as Batocara bowningi				was identified as Batocara bowningi			donated by W.B. Wolf, 1932. Bowning		donated T. Jones, 1936 Coppins Crossing Canberra

ABBREVNS: carapace; cephalon; D librigena; pygidium; cranidium; thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Australian Museum specimens

Encrinurus mitchelli

SPECIMEN NUMBER	AM F 38359	51783	35995							
preserved as —	▽ S	⊖ S	△ P							
A1			7.8							
A9			—							
A10			8.5							
B			6.7							
B1			7.5							
C2			1.6							
D10			1.7							
I = J1			15.6							
J2			6.2							
J4			—							
J6			0.7							
K			4.9							
K2			5.2							
K'10			3.6							
Q										
R										
R1										
W	14.8	14.0								
X	4.0	—								
Y1	—	—								
Z	14.1	11.4								
Z1	—	—								
Nr. PLEURAE	11	10								
NUMBER OF RACHIAL RINGS	>23	—								
TUBERCLES ON RINGS —	4 8 12 16									
A										
P										
COMMENTS	Bradbo 1938	Barning	Mitchell coll.: 'Gurnett's'. originally E. sp. indet.							

ABBREVNS: ⊖ carapace; ⬭ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS:

Encrinurus mitchelli : B.M.R. specimens

localities 7448 0101 } Coppins Crossing (Canberra 1:250 000 sheet)
0137 }
0285 }

CPC specimens (figured) 6-21/12/1976

SPECIMEN NUMBER	CPC (B) 18459	18587	18598							
preserved as —	△ s incomplete	⌓ s incompl.	▽ c							
A_1	9.5	4.9								
A_9	—	—								
A_{10}	—	—								
B	7.9	4.3								
B_1	8.9	4.8								
C_2	—	1.0								
D_{10}	1.7*	1.4								
I ▫J_1	19.5*	—								
J_2	8.4	4.5								
J_4	10.0 d	5.5*								
J_6	1.9	1.2								
K	5.1	2.8								
K_2	6.8	3.1								
K'_{10}	3.4	2.1								
Q										
R										
R_1										
W			7.2							
X			2.3							
Y_1			5.6							
Z			6.5							
Z_1			6.0							
Nr. PLEURAE			11							
NUMBER OF RACHIAL RINGS			27							
TUBERCLES ON RINGS —			3?, 6?, 10?, 15? (all very faint)							
A										
P										
COMMENTS	loc. 7448 0101	distorted specimen. loc. 7448 0177	identity uncertain loc. 7448 0285							

ABBREVNS: ⊖ carapace; ⌓ cephalon; D librigena; ▽ pygidium; S steinkern; C cast; P partly testiferous; ☆ estimated value; ▲ cranidium; ▭ thorax; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : BMR. specimens.

locality 7448 010

F collection specimens.

6/12/1976

SPECIMEN NUMBER	F24398	24399	24402	24403	24405	24406	24407	24409	24414	24416
preserved as —	▽ s slightly damaged	▽ c slightly damaged	▽ s damaged	△ s	▽ s	▽ c	⌓ c incomplete	▽ s incomplete	▽ s incomplete	▽ c
A1				7.5			6.5			
A9				—			7.7*			
A10				7.9			7.3			
B				5.9			5.3			
B1				6.5			6.0			
C2				1.7			1.4			
D10				2.1			1.6			
I - J1				11.8 d			14.4 d			
J2				4.6			4.3			
J4				6.0			5.6			
J6				1.2			1.1			
K				3.1			3.2			
K2				3.8			3.3			
K'10				2.4			2.3			
Q										
R										
R1										
W	7.2 d	7.5	—		7.7	8.4		14.0 d	12.8 d	9.5
X	2.1*	2.3	2.4		2.4	2.7		3.1	3.7	2.8
Y1	5.3	6.2*	5.1		6.6*	6.6		—	8.3	6.8
Z	6.5	—	6.5		—	7.7		—	9.7	8.0
Z1	5.9	7.1*	6.0		7.3	7.3		—	8.9	7.5
Nº PLEURAE	11	10	10		10	11		>6	11	11
NUMBER OF RACHIAL RINGS	26	23	19		22	27		>17	26	22?
TUBERCLES ON RINGS —	4?, 7?, 5?, 11 (all very faint)	?	± 7 (faint)		3?, ±, 5?, 7, 11, 14 (all very low)	?		2, 4 (faint), 6, 10, 15	2, 4,	4, 7, 8, 11 (very faint)
A										
P						identity uncertain				
COMMENTS	articulating half-ring prominent					11th pleura fused as post-rachial rib.				11th pleura fused as post-rachial rib

ABBREVIUS: ⊖ carapace △ cephalon D librigena ▽ pygidium S steinkern * estimated value
△ cranidium □ thorax C cast P partly testiferous
d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens

locality 74480101

F collection specimens

7/12/1976

SPECIMEN NUMBER	F24418	24419	24420 (A)	24420 (B)	24421	24423	24424	24427	24429	24430
preserved as —	▽ s incomplete	▽ c incomplete	△ s	△ c incomplete	▽ s damaged	⌓ s incomplete	▽ c	▽ c incomplete	▽ s incomplete	⌓ s
A1			9.0	9.1*		4.9				5.1
A9			—	—		—				5.9
A10			9.2	—		—				5.6
B			7.6	7.3		4.1				4.4
B1			8.6	8.4		4.6				4.9
C2			2.0	2.3		1.0				1.1
D10			1.9	1.4		—				1.1
I J1			19.8	—		11.3				11.4
J2			7.6	7.7		3.9				4.0
J4			10.4	9.8 d		5.0				4.8
J6			1.7	1.8		0.7				0.6
K			5.2	4.9*		3.2				2.9
K2			5.7	6.1		3.1				3.1
K'10			3.4	3.8		2.3				1.9
Q										
R										
R1										
W	7.9 d	7.3 d			6.2		9.6*	6.4 d	—	
X	2.1	2.3			1.9		2.9	2.8	4.1	
Y1	6.2	6.0			4.7		6.8	4.5	10.9	
Z	—	7.0			5.7		8.8	—	13.0*	
Z1	6.5	6.6			5.3		8.2	5.3	12.5*	
Nr. PLEURAE	10	11			11		11	11	11	
NUMBER OF RACHIAL RINGS	24?	23			23?		25	22	24	
TUBERCLES ON RINGS —	4, 7, 12 (all very small)	3, 4, 6, 9, 14? (all faint)			?		3, 4, 7, 12 (very faint)	6? (very uncertain)	4, 7, 10, 14, 19 (all well developed)	
A										
P										
COMMENTS		11th pleura fused as post-rachial rib			identity uncertain. rachis obscure	identity uncertain	11th pleura fused as post-rachial rib			identity uncertain — cf. E. civicae

ABBREVNS: ⊖ carapace; ⌓ cephalon; △ cranidium; D librigena; ▽ pygidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens
locality 74480101

F collection specimens

7/12/1976

SPECIMEN NUMBER	F24431	24432	24433	24434	24436	24437	24440	24441	24443 (B)	24445
preserved as —	△ C incomplete	▽ C incomplete	▽ S	△ S incomplete	△ S	△ S incomplete	▽ S incomplete	△ C incomplete	△ C incomplete	▽ S
A1	—			9.7	5.5	8.5		7.9	—	
A9	—			—	—	—		—	—	
A10	—			—	5.6	—		—	—	
B	5.5*			8.3	4.5	7.0		6.5	—	
B1	6.5*			9.3	5.2	8.0		7.5	—	
C2	1.6			—	—	1.5		1.6	2.7	
D10	—			—	1.7	1.6		1.4	3.0	
I ◦J1	—			—	10.6	20.0*		—	—	
J2	7.3d			9.0	3.9	7.3*		7.5*	9.5*	
J4	8.1			—	5.2d	9.0		8.0d	12.1	
J6	1.5			—	0.8	1.9		1.6	2.1	
K	4.5			5.3*	2.9	4.5		4.9	7.9	
K2	5.8			7.2	3.1	6.0		6.2	7.4	
K'10	3.4			3.8	2.1	3.0		3.4	5.4	
Q										
R										
R1										
W		7.2d	7.9				18.5d			11.6
X		2.3	2.2				5.2d			3.0
Y1		6.0	6.2				10.8			8.3
Z		6.7*	7.1				13.2			9.3
Z1		6.4*	6.7				12.2			8.6
Nr. PLEURAE		10?	11				12			11
NUMBER OF RACHIAL RINGS		23?	22				26			26
TUBERCLES ON RINGS —		4, 7, 12 (very faint)	4, 7, ...				1P, 2, 5, 9, 14, 20? (5, 9, & 14 very distinct, others faint)			4, 7, 8, 11, 12 (8 low)
A										
P										
COMMENTS			last pleura almost fused				12th pleura fused as very fine post-rachial rib.			11th pleura fused as post-rachial rib.

ABBREVNS: ⊖ carapace; ⌓ cephalon; D librigena; ▽ hypidium; △ cranidium; ▭ thorax; S skeinkorn; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli: B.M.R. specimens

locality 74480 101

F collection specimens.

8/12/1976

SPECIMEN NUMBER	F24449	F24452	24453 (A)	24461	24462	24464	24465	24466	24467 (C)	24469
preserved as —	▽ c incomplete	▽ c incomplete	▽ c incomplete	▽ s incomplete	△ s incomplete	▽ s	▽ c incomplete	⌓	▽ s	▽ s
A1					~~10~~.5			6.5		
A9					—			7.1		
A10					12.5			6.7		
B					8.3			5.0*		
B1					9.5			6.0*		
C2					—			2.1		
D10					—			1.6		
I = J1					24.5d			14.5		
J2					7.6			5.2		
J4					—			5.7		
J6					—			0.5		
K					5.8			4.0		
K2					6.7			3.8		
K'10					4.2			2.7		
Q										
R										
R1										
W	8.8 d	8.9d	—	8.0 d		11.0d	5.6		7.1	8.5
X	2.7d	2.5	2.1	2.1		2.4	2.0		2.1	2.7
Y1	6.4	6.8	5.9	6.3		6.6	5.1		5.6*	6.4
Z	—	7.4	6.6*	—		7.9	6.0		6.7	7.7
Z1	7.0	7.0	6.3*	7.0		7.5	5.6		6.1	7.2
Nr. PLEURAE	11	11	11	11		10	10		10	10
NUMBER OF RACHIAL RINGS	27	25?*	23*	>19		27	22		24?	>19
TUBERCLES ON RINGS —	4?, 7?, 11?, 14 (all very faint)	3?, 7, 12	5, 7, 11	6?, 9? (very faint, may be spurious)		2??, 5, 9?, 13, 15?.	4, 7, 10, 11, 14 (all very faint)		3?, 5, 9, 14 (all very faint)	?
A										
P										
COMMENTS			11th pleura fused as post-radial rib.			identity uncertain. cf. Cornocephalus urbis				

ABBREVNS: ⊖ carapace ⌓ cephalon D librigena ▽ pygidium △ cranidium ▭ thorax S steinkern C cast P partly textiferous d calculated from half-width * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens.
locality 7448 0101

F collection specimens

8-9/12/1976

SPECIMEN NUMBER preserved as —	F24470 ▽ S incomplete	24471 ▽ S incomplete	24472 △ S incomplete	24474 △ S incomplete	24475 △ S incomplete	24476 (A) △ S incomplete	24476 (B) △ C incomplete	24477 △ S	24479 (b) ▽ C incomplete
A1			5.8	6.1	5.7	7.1	7.0	7.5	
A9			—	—	—	—	—	—	
A10			6.3	7.1	6.9	7.3	—	8.6	
B			4.6	5.0	4.9	6.3	5.8	6.1	
B1			5.3	5.8	5.5	6.9	6.7	7.1	
C2			1.2	1.2	1.1	—	1.6	1.5	
D10			1.6	1.6	1.2	—	1.1	1.8	
I ∘J1			14.5* d	14.0 d	12.4	15.8 d	—	14.9	
J2			4.3	5.1	4.8	6.2*	7.1 d	6.2	
J4			5.2	5.9	6.2 d	—	7.0	7.0	
J6			0.7	0.7	1.3	—	1.4	1.3	
K			3.3	3.5	2.8	3.8	4.0	3.5	
K2			3.1	3.7	4.1	4.9	5.1	5.0	
K'10			2.4	2.7	2.0	2.5	2.8	2.5	
Q									
R									
R1									
W	7.8	8.2 d							8.8 d
X	2.4	1.9							2.6
Y1	5.5	5.3							6.1
Z	6.4	6.5							7.1
Z1	5.9	6.0							6.9
No. PLEURAE	11	10							10
NUMBER OF RACHIAL RINGS	25	19*							22
TUBERCLES ON RINGS —	3?, 5?, 10? (all very faint)	?							4, 6, 9, 11, 12 (very faint)
A									
P									
COMMENTS	11th pleura almost fused to single rib	10th pleura fused as post-rachial rib.	identity uncertain						

ABBREVNS: ⊖ carapace; ⌂ cephalon; △ cranidium; D librigena; ▽ pygidium; ▭ thorax; S steinkern; C cast; P partly tertiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens

locality 74480101

F collection specimens

9/12/1976

SPECIMEN NUMBER	F 24481	24483 (H)	24483 (K)	24484	24486	24487	24488	24491	24493	24494
preserved as —	△ s incomplete	▽ s	▽ c	△ s	▽ c incomplete	△ c incomplete	△ s incomplete	▽ c incomplete	△ c incomplete	▽ s
A1	8.6			5.3		8.0	5.9		3.4	
A9	—			—		—	—		—	
A10	8.9			6.2		8.8*	—		—	
B	7.3			4.5		6.7	5.0		2.7	
B1	8.3			5.0		7.6	5.6		3.2	
C2	1.4			1.2		2.1	—		0.7	
D10	2.0			1.5		1.2	—		0.6	
I ∘J1	21.2d			11.0		—	—		8.2d	
J2	7.5			4.3		—	—		3.5	
J4	8.8			5.5		—	—		3.5	
J6	1.7			0.8		1.4	—		0.7	
K	4.2			3.1		—	3.4d		1.7*	
K2	6.2			3.5		3.7	—		2.9	
K'10	3.1			2.4		2.3	2.4		1.4	
Q										
R										
R1										
W		8.0	8.5*		6.4d			13.0d		5.9
X		2.3	2.6		1.7			3.4		1.9
Y1		6.5	6.5		4.3			8.2		4.7
Z		—	7.4		5.2			10.2		5.6
Z1		6.8	7.3		4.9			9.9		5.1
Nr. PLEURAE		11	11		10			11?		11
NUMBER OF RACHIAL AR		≥21	25		23			≥20		22*
TUBERCLES ON RACHIS —		4, 6?, 9?, 11?, 15 not faint			3?, 4?, 7, 10, 14 (all very faint)			5, 9?, 12 (very faint)		—
A										
P										
COMMENTS		11th pleura fused as single post-rachial rib.		identity uncertain						11th pleura fused as post-rachial rib.

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly articulated; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinuras mitchelli: B.M.R. specimens

locality 74480101

F collection specimens

9/12/1976

SPECIMEN NUMBER	F24495	24496	24500 (A)	24504	24511	24513	24515	24521	24522	24524 (A)
preserved as —	▽ s incomplete	▽ s incomplete	△ s	△ s, incomplete	▽ s incomplete	▽ s	▽ s incomplete	△ s incomplete	▽ s	▽ c incomplete
A1			4.8	—				9.8		
A9			—	—				—		
A10			5.3	—				—		
B			4.0	5.1				8.0		
B1			4.6	—				9.3		
C2			1.3	1.2				2.2		
D10			1.5	1.7				2.4		
I or J1			11.5	15.4				20*		
J2			5.4	5.8				8.1		
J4			6.3	7.4				10.8d		
J6			1.0	1.7				2.4		
K			3.3	3.8				5.2d		
K2			3.9	4.6				6.5*		
K'10			2.4	2.8				4.0		
Q										
R										
R1										
W	7.9d	7.4			9.1	6.4	6.9d		6.4	7.6d
X	2.2	1.9			2.7	1.8	1.9		1.9	2.2
Y1	5.5*	5.8			6.3	4.6	5.7		4.5	5.4
Z	6.7	7.1			7.5*	5.3	—		5.4	6.4
Z1	6.0	6.6			7.1*	4.9	5.9		4.9	6.0
Nr PLEURAE	10 or 11	11			10?	10	9		11	11
NUMBER OF RACHIAL RIBS	22*	25			20?	24	20?		26?	26?
TUBERCLES ON RIBS —	3?, 4, 6?, 7, 13 (all very faint)	4, 10, 11			4, 7, 10 (faint)	4, 7, 10 (very low)	obscure		3?, 4, 7, 11 (faint)	4, 7, 10, 11
A										
P								—		
COMMENTS	11th pleura uncertain — faint post-rachial rib?	11th pleura fused as post-rachial rib		distorted						

OBSERVNS: ⊖ carapace; ⌓ cephalon; △ conidium; D librigena; ▽ pygidium; ▭ thorax; S steinkern; C cast; P partly lateriferous; ☆ estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.A. specimens
locality 74480101

F collection specimens

10/12/1976

SPECIMEN NUMBER	F24525	24526	24527	24528	24529	24530	24531	24533	24534	24535
preserved as —	▽ s	△ s incomplete	▽ s	▽ s	△ c incomplete	△ s incomplete	△ s incomplete	▽ s incomplete	▽ s incomplete	△ s incomplete
A_1		—			8.4	8.3	3.5			9.8
A_9		—			—	—	—			—
A_{10}		—			—	8.8	4.1			10.7
B		5.1			7.1	6.9	2.8			8.0
B_1		6.2			8.0	7.7	3.3			9.3
C_2		—			—	1.8	1.0			1.7
D_{10}		—			—	1.9	1.0			2.9
I ∘ J_1		—			—	—	—			20.5d
J_2		—			7.7	—	—			7.9
J_4		—			—	7.2	2.7			9.8
J_6		—			—	1.7	0.6			1.9
K		3.4*			—	—	—			5.5
K_2		4.0			6.1	—	—			6.2
K'_{10}		2.5			3.4	—	—			3.7
Q										
R										
R_1										
W	7.2		7.4	9.1				8.7d	5.7*	
X	2.0		2.0	2.3				2.2	1.6	
Y_1	5.1		4.9	5.7				4.9	4.4	
Z	6.0		6.2	6.5				6.0*	5.3	
Z_1	5.5		5.7	6.0				5.6*	4.8	
Nº PLEURAE	11		10	10				>9	10?	
NUMBER OF RACHIAL RINGS	25*		>16	19?				>18	≥20	
TUBERCLES ON RINGS —	3, 4, 8? (faint)		4, 7, 11?	3, 5, 8, ... (all very faint)				4, 8, 9, 11, 14 (all low)	3?, 4, 7, 11	
A										
P										
COMMENTS	11th pleura fused as post-rachial rib	identity uncertain				specimen flattened	specimen flattened, identity uncertain	identity uncertain — cf. Coronocephalus rotis		

ABBREVIATIONS: ⊖ carapace; △ cephalon; ▽ cranidium; D librigenae; ▽ hypostoma; ▽ pygidium; S skeletonized; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens

locality 7448 0101

F collection specimens

10/12/1976

SPECIMEN NUMBER	F24539 (A)	24540	24541	24542	24543	24549				
preserved as —	▽ s incomplete	△ c incomplete	▽ c incomplete	△ s incomplete	▽ s	▽ c incomplete				
A1		8.6		9.2						
A9		—		—						
A10		—		—						
B		6.8		7.6						
B1		8.0		8.5						
C2		1.8		1.9						
D10		1.4		1.8						
I – J1		—		—						
J2		7.5*		7.4						
J4		8.4		9.2						
J6		1.8		2.2						
K		5.0		4.9						
K2		5.9		6.0						
K'10		3.3		3.4						
Q										
R										
R1										
W	6.9 d		14.2 d		7.3 d	—				
X	2.3		3.5		2.1	2.8				
Y1	5.4		9.2		5.5	6.4				
Z	6.4		11.6		6.7*	7.6				
Z1	5.9		11.1		6.3	7.2				
Nr. PLEURAE	11		13		10 or 11	11				
NUMBER OF RACHIAL RINGS	22*		27		27	26				
TUBERCLES ON RINGS —	4, 7, 11?, 12?, ...		3, 7, 10, 14 (all very low)		4, 7, 11, 14 (faint)	4 (very low)				
A										
P										
COMMENTS			13th pleura fused as post-rachial rib.							

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli: B.M.R. specimens

locality 7448 0177

F-collection specimens.

10/12/1976

SPECIMEN NUMBER	F24619	24623	24624 (b)	24626	24627	24630	24634	24636	24643	24645
preserved as —	▽ s incomplete	▽ s	▽ c incomplete	▽ s slightly damaged	△ s incomplete	▽ s damaged	△ s incomplete	△ s damaged	△ s incomplete	△ s incomplete
A_1					6.5		2.8	9.1	5.5	6.0*
A_9					—		—	—	—	—
A_{10}					7.5*		3.7	11.3	6.0	—
B					5.2		2.5	7.5	4.5	5.1
B_1					6.0		2.7	8.5	5.0	5.6*
C_2					1.8		0.7	2.0	—	1.2
D_{10}					2.3*		0.8	2.3	1.2	1.7
I = J_1					15.0*		6.3 d	22.1 d	13.1 d	13.0*
J_2					5.5		2.6	7.9	4.9	5.4
J_4					6.6		3.1	9.5	—	7.3
J_6					1.5		0.6	2.0	—	1.4
K					3.6*		1.5	5.0	3.2	3.7
K_2					4.1		2.0	6.2	3.6	3.9
K'_{10}					2.6*		1.2	3.9	2.4	2.6
Q										
R										
R_1										
W	5.4	5.4	18*	14.2*		4.4				
X	1.3	1.4	4.9	3.8		1.2				
Y_1	3.3	3.4	11.4	9.1		2.8				
Z	3.8	4.2	13.9	10.9		3.3				
Z_1	3.5	3.9	12.9	10.1		3.0				
Nr. PLEURAE	10?	11?	11	10		9				
NUMBER OF RACHIAL RINGS	>18	24*	24	22		20				
TUBERCLES ON RINGS —	6?, 10?	3, 7, 12, 16?	3, 6, 7?, 10?, 18?, 22.	3? (faint), 4?, 7, 11, 14?		4, 7?, ...				
A			11th pleura forked as post-rachial rib.							
P										
COMMENTS			identity uncertain — cf. Coronocephalus orbis							

ABBREVIUS: ⊖ carapace ⌓ cephalon D librigena ▽ pygidium S steinkern C cast P partly testiferous △ cranidium ▭ thorax

* estimated value

d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens

locality 74480177

F-collection specimens

20/12/1976

SPECIMEN NUMBER	F24648	24657	24660	24667	24671	24672				
preserved as —	△ c incomplete	▽ c	△ s incomplete	▽ s incomplete	△ c incomplete	⌂ c incomplete				
A1	8.9		5.7		10.9	—				
A9	—		—		—	—				
A10	—		7.0*		—	—				
B	7.5*		4.5		9.1	—				
B1	8.5		5.2		10.4	—				
C2	2.2		1.3		2.7	1.5				
D10	—		1.5		1.8	1.4				
I ▫J1	—		14.0*		23*	12.2d				
J2	8.6		5.0		9.5	4.3d				
J4	10.5		5.8		11.5	5.0d				
J6	2.6		1.5		1.9	1.2				
K	5.0		3.0		5.9	3.1				
K2	7.0		3.8		8.0	3.4d				
K'10	3.8		2.3		4.4	2.4				
Q						—				
R						12.0*d				
R1						3.3				
W		6.6		14.6d						
X		2.1		3.7						
Y1		4.3		9.4						
Z		5.5		12.0						
Z1		5.2		11.2						
Nº PLEURAE		10		10						
NUMBER OF RACHIAL RINGS		22		20?						
TUBERCLES ON RINGS —		4, 7, 11, 12, 15		4?, 7, 11, 15?						
A										
P										
COMMENTS		10th pleura fused as post-rachial rib.			Identity uncertain					
ABBREVNS	⊖ carapace	⬭ cephalon △ cranidium	D librigena ▭ thorax	▽ pygidium	S steinkern C cast		P partly testiferous		* estimated value d calculated from half-width	

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens.
locality 7448 0285

F-collection specimens

21/12/1976

SPECIMEN NUMBER	F24695	24696	24697 (A)	24698 (A)	24699	24700	24701	24706 (C)	24708	24709
preserved as —	▽ c incomplete	▽ c incomplete	▽ c incomplete	▽ s incomplete	△ s incomplete	▽ s incomplete	▽ s incomplete	▽ s	△ s incomplete	▽ s incomplete
A1					5.6				8.2	
A9					7.1				—	
A10					6.8				8.4	
B					4.7				7.2	
B1					5.4				8.0	
C2					1.1				1.6	
D10					1.8				2.0	
I - J1					11.2* d				—	
J2					4.0				6.5	
J4					4.6				8.4	
J6					0.5				1.8	
K					3.0				4.4	
K2					3.2				5.5	
K'10					2.2				2.8	
Q										
R										
R1										
W	—	—	7.8*	7.1		9.1 d	10.7	15.0 d		8.0 d
X	2.4	2.8	2.5	2.4		2.3	2.7	4.1		2.2
Y1	5.9	6.5	5.2	6.5*		6.1	7.2	11.6		5.7*
Z	—	7.9	—	—		7.1	8.6	13.3		6.9
Z1	6.7	7.5	5.8	7.0*		6.4	7.8	12.4		6.2
Nr PLEURAE	11	11	11	10		10	11	11		10
NUMBER OF RACHIAL RINGS	24	27*	25	22*		27	26*	24*		23
TUBERCLES ON RINGS —	—	3, 4, 7, 8, 15? (all very low)	4, 7, 8?, 11 (very faint)	7 (low, ad on steinkern)		1?, 4, 8?, 10?, 15? (all very low)	—	4, 6?, 7, 11, 15, 20		4, 6, 7, 11?
A										
P										
COMMENTS	identity uncertain 11th pleura fused		Identity uncertain 11th pleura fused				11th pleura fused as post-rachial rib.		cf.	

ABBREVIATIONS: ⊖ carapace; △ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens

locality 74480285

F-collection specimens

22/12/1976

SPECIMEN NUMBER	F24710	24711	24713	24714	24715	24719	24720	24722	24723	24726
preserved as —	△ s incomplete	▽ s incomplete	⬠ s incomplete	△ s incomplete	▽ s incomplete	△ s	▽ c incomplete	▽ s	⬠ s damaged	△ s incomplete
A1	5.1		5.4	5.7		8.9			5.2	7.4
A9	—		6.4*	—		—			6.4	—
A10			5.9	—		10.4			6.2	—
B	4.4		4.6	4.7		7.5			3.8	6.2
B1	4.8		4.9	5.3		8.2			4.9	7.1
C2	1.3		1.4	1.2		1.8			1.2	1.3
D10	1.5		1.6	1.7		2.0			1.4	1.6
I - J1	—		11.3 d	—		24.0 d			11.3	18.5*
J2	3.7		—	4.6		8.8			3.7	6.4
J4	4.8 d		4.5* d	5.8		10.2			4.9	8.4
J6	0.8		0.8	1.1		2.1			0.7	1.5
K	2.5		2.8	3.3		5.6			2.7	4.5
K2	3.0		—	3.5		7.0			3.2	5.4
K'10	1.8		2.1	2.4		3.9			2.1	3.2
Q										
R										
R1										
W		5.8			6.9		8.0 d	9.2		
X		1.7			2.1		2.2	2.5		
Y1		4.1*			—		5.4	7.0*		
Z		—			—		6.3	8.0		
Z1		4.3			6.0*		5.9	7.5		
Nº PLEURAE		11			>8		11	10		
NUMBER OF RACHIAL RINGS		>20			>17		26	24*		
TUBERCLES ON RINGS —		3?, 4, ... (very faint)			7?, 11 (very low)		4, 11 (very low)	4, 7, 10?, 14 (very low)		
A										
P										
COMMENTS		11th pleura fused as post-rachial rib.	identity uncertain				11th pleura fused as post-rachial rib.			

ABBREVNS: ⊖ cavaprae ⬠ cephalon D librigena ▽ pygidium S steinkern C cast △ cranidium ▭ thorax P partly testiferous d calculated from half-width * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens
locality 7448 0285

F-collection specimens

22/12/1976

SPECIMEN NUMBER preserved as —	F24728 ⌂ s incomplete									
A1	6.2									
A9	—									
A10	—									
B	5.4									
B1	6.0									
C2	1.7									
D10	1.8									
I - J1	14.0d									
J2	5.3									
J4	6.7									
J6	1.0									
K	4.1									
K2	4.1									
K'10	2.9									
Q										
R										
R1										
W										
X										
Y1										
Z										
Z1										
Nº PLEURAE NUMBER OF RACHIAL AND TUBERCLES ON RINGS —										
A										
P										
COMMENTS										
ABBREVNS	⊖ cranidium ⌂ cephalon D librigena ⌂ pygidium ⌂ cranidium ⌂ thorax					S steinkern C cast	P partly testiferous d calculated from half-width		☆ estimated value	

DATA SHEET — ENCRINURID MEASUREMENTS
Encrinurus mitchelli : B.M.R. specimens
locality 7448 0101

SPECIMEN NUMBER	7448 0101/3.1	7448 0101/25.2	7448 0101/75.2	7448 0101/79.2	7448 0101/119.2	7448 0101/126.2	7448 0101/136.1	7448 0101/143.4	7448 0101/147.20	7448 0101/154.2
preserved as —	▽ S incomplete	▽ S incomplete	glabella	▽ S	▽ S	△ S incomplete	▽ S	△ S poorly preserv	▽ c damaged	▽ S damaged
A1			7.7			6.3		8.1		
A9			—			—		—		
A10			—			6.9		9.6		
B			6.6			4.9		6.8		
B1			7.3			5.8		7.7		
C2			—			1.5		1.6		
D10			—			1.7		1.5		
I-J1			—			11.9		16.5		
J2			5.5			4.4		7.4		
J4						5.7		8.5		
J6			—			0.9		1.6		
K			3.4 d			3.4		4.5		
K2			4.8			3.4		5.8		
K'10			2.4			2.4		3.4		
Q										
R										
R1										
W	8.6 d	7.8 d		8.3	9.2*		14.4		7.0*	7.8 d
X	2.0	1.8		2.4	2.6*		3.7		2.6	2.0
Y1	5.3	—		6.3*	6.4*		10.8*		6.3	4.6
Z	—	4.7*		6.9	7.5		11.9		7.4	—
Z1	5.9	4.5*		6.5	7.1		11.4		6.9	5.0*
Nº PLEURAE	10?	11		9	10		9		10?	9?
NUMBER OF RACHIAL RINGS	>19	>16		>18	22*		24*		≥22	>15
TUBERCLES ON RINGS —	3?, 5? (very faint)	4, 6, 7, 10		4?, ...	?		2, 3, 6, 10, 14		?	2, 4, ...
A										
P										
COMMENTS		11th pleura fused as post-rachial rib		identity uncertain		identity uncertain				
ABBREVNS	⊖ carapace	△ cephalon △ cranidium	D librigena ▽ hypostome	▽ pygidium		S steinkern C cast	P partly testiferous		* estimated value d calculated from half-width	

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus mitchelli : B.M.R. specimens localities 7448 0101 & 7448 0177

SPECIMEN NUMBER	7448 0101/ 158	7448 0101/ 177.16	7448 0101/ 185B.29	7448 0101/ 203B.1	7448 0177/ 126B.54				
preserved as —	▽ S incomplete	△ S damaged	▽ S	▽ S	△ S incomplete				
A1		6.9			6.4				
A9		8.4*			—				
A10		8.3			7.4				
B		5.8			5.4				
B1		6.5			5.9				
C2		1.3			1.4				
D10		2.0			1.6				
I J1		14.8 d			16.0*				
J2		5.2 d			5.4				
J4		7* d			7.2*				
J6		1.0			1.4				
K		3.4 d			4.0*				
K2		4.5 d			4.2*				
K'10		2.7 d			2.6*				
Q									
R									
R1									
W	7.7		7.9	7.6 d					
X	2.0		2.2	2.0					
Y1	5.6		5.5	4.7					
Z	—		6.7	5.7					
Z1	6.5		6.1	5.3					
Nr. PLEURAE	10		10	11?					
NUMBER OF RACHIAL RING TUBERCLES ON RINGS —	20* 2,4, ... (very faint)		20* 4,7,11?,13?	23 4,8,9,12? (very low)					
A									
P									
COMMENTS									

ABBREVNS: ⊖ carapace ⌓ cephalon D librigenae ▽ pygidium S steinkern C cast P partly testiferous d calculated from half-width * estimated value △ cranidium ▭ thorax

Encrinurus mitchelli: Hypostome measurements

	CPC 18460	F 24625	F 24644	F 24653	F 24677
locality 7448 -	0101	0177	0177	0177	0177
length (sag.)	5.9	10.6	7.8	8.8	9.4
length to anterior wings (exsag.)	2.8	4.0	3.6	3.1	3.1
length to maculae (exsag.)	3.8	6.4	5.1	5.3	5.3
length over median body (sag.)	4.8	7.8	5.8	6.6	6.7
width (over anterior wings)	4.9	10.5*	7.6	8.8	8.0*
width of median body	3.3	6.2	4.1	4.6	5.0

*estimated value; all dimensions in millimetres.

locality 74480177, specimen -	104.10	125.3	136.10
length (sag.)	8.7	9.5	6.8
length to anterior wings (exsag.)	3.0	-	2.5
length to maculae (exsag.)	5.3	5.5	4.0
length over median body (sag.)	6.8	7.2	5.5
width (over anterior wings)	8.6	-	6.3*
width of median body	4.7	4.9	3.5

Encrinurus mitchelli Foerste: PYGIDIAL TUBERCULATION.

List of B.M.R. specimens having sagittal tubercles (except where full measurement data sheets are provided). The tuberculate rachial rings are listed according to the standard system previously published.

Locality 7448 0009

F24246 --- 2, 4?, 6, 9 (specimen incomplete)

F24247 --- 6, 12 (specimen incomplete, identity doubtful)

F24248/2 - 6?, 10?, 14? (specimen incomplete, identity uncertain)

CPC 18029 (figured specimen) -- 2?, 4?, 8? (specimen incomplete)

F24250 --- 3?, 7?, 11?, 15? (specimen incomplete)

Locality 7448 0027

F24264 --- 5?, 6, 12?, 14, 20 (specimen incomplete; sp. cf. mitchelli)

F24266 --- 5?, 6p?, 10?, 13?, 17? (tubercles generally faint; identity uncertain)

Locality 7448 0050

F24273 --- 5?, 9?, 14? (sp. cf. mitchelli)

Locality 7448 0051

F24277 --- 4, 8, 12, 16, 20

Locality 7448 0052

CPC 18032 (figured specimen) -- 6, 10, 15, 20, 25

F24285 --- 3, 7, 12, 16?, 17? (sp. cf. mitchelli)

F24287 --- 6, 9?, 11, 16? (specimen incomplete)

F24288 --- 6, 11, 15/16 (specimen incomplete)

F24289 --- 5?, 9?, 12?

Locality 7448 0053

F24294 --- 6, 10, 15, 21?

Locality 7448 0057

F24295 --- 4, 7, 11, 15 (specimen incomplete)

F24299 --- 2?, 6, 10, 15, 20? (specimen incomplete)

F24302 --- 4, 8, 12 (specimen incomplete)

F24303 --- 3, 7, 12, 15?, 18?

F24304 --- 2, 6, 10, 14? (specimen incomplete)

F24305 --- 2, 6, 10, 15, 21?

Locality 7448 0066

F24315 --- 5, 8?, 9? (specimen incomplete, identity uncertain)

F24316 --- 2, 5, 8/9, 16? (specimen incomplete; sp. cf. mitchelli)

F24317 --- 4, 8, 12 (specimen incomplete)

Locality 7448 0072

F24337 --- 2?, 3, 6, 8?, 12, 16 (specimen incomplete)

F24338 --- 2, 5, 9, 12 (specimen incomplete; sp. cf. mitchelli)

F24340 --- 4, 5, 8, 10, 12 (specimen incomplete)

F24341 --- 2?, 7, 10, 15, 19 (specimen incomplete)

F24342 --- 2, 6, 10, 15, 17 (specimen incomplete; sp. cf. mitchelli)

F24343 --- 2/3?, 5, 9, 14, 19?

F24347 --- 2, 5/6, 9/10, 16, 20 (sp. cf. mitchelli)

F24352 --- 3?, 6, 10, 14?, 21?

F24362 --- 3, 5, 9, 13, 18, 22?

F24364 --- 4, 8/9, 11, 14?, 18, 22, 27? (sp. cf. mitchelli)

F24366 --- 2, 5, 10, 15

F24368 --- 2, 5, 9, 13 (specimen incomplete)

F24369 --- 2?, 5?, 8, 12, 16, 20? (identity uncertain)

Locality 7448 0075

F24372 --- 2?, 4?, 8?, 16? (specimen incomplete, identity uncertain)

Locality 7448 0076

F24373 --- 2?, 6, 8?, 10?, 15, 18?, 20 (sp. cf. mitchelli?)

Locality 7448 0083

F24374 --- 4?, 8?, 12?, 19? (specimen incomplete; sp. cf. mitchelli?)

Locality 7448 0085

F24378 --- 2, 5, 9?, 15?, 19/20?

F24379 --- 4, 7, 10, 14 (identity uncertain)

F24380 --- 4, 8, 12, 14, 16, 17, 21/22

F24381 --- 2, 4, 7, 8, 11, 12, 16 (specimen incomplete)

F24383 --- 2, 6, 9?, 10, 14, 19, 23/24, 28?

F24385 --- 3?, 5, 8, 12, 16, 20 (identity uncertain)

F24388 --- 1?, 4, 8, 12, 16 (identity uncertain)

F24390 --- 4, 5, 7, 9, 12, 16, 20?

F24391 --- 4, 7, 11, 15, 19

Locality 7448 0086

F24395 --- 5, 7, 8, 9, 13, 19 (identity uncertain)

Locality 7448 0087

Specimen 7448 0087/10 --- 3, 6?, 7, 11/12, 16?, 20 (sp. cf. mitchelli?)

Locality 7448 0101

See measurement data sheets

Locality 7448 0123

CPC 18526 (figured specimen) -- 5 (very faint) (sp. cf. mitchelli)

Locality 7448 0143

F24580 --- 4, 8, 11 (sp. cf. mitchelli?)

Locality 7448 0171

F24596 --- 3, 6, 8, 10, 14, 19

F24599 --- 5?, 9? (tubercles very faint; specimen incomplete)

Locality 7448 0177

See measurement data sheets

Locality 7448 0193

F24684 --- 4, 7, 8, 11?, 15? (identity uncertain)

Locality 7448 0257

F24691 --- 3?, 6?, 10? (identity uncertain)

Locality 7448 0285

See measurement data sheets; also -

F24730 --- 2, 3p, 6, 10, 14

Encrinurus mitchelli Foerste: PYGIDIAL TUBERCULATION.

Position of anterior sagittal tubercle, and matrices showing sizes of non-tuberculate gaps between sagittal tubercles. All figures shown as percentages; in gap-size matrices, percentage is of specimens with that gap preserved, and is omitted if <10%.

(a) Yass Basin specimens

first tubercle on rachial ring:	2	3	4	5	no tubercles	total
number of specimens	-	23	31	3	19	76
% number of specimens	-	30	41	4	25	100

gap number:		1	2	3	4
number of rings in gap	1				
	2	60	23		
	3	37	63	69	51
	4		11	29	36

(b) Specimens from localities in the Walker Volcanics

first tubercle on rachial ring:	2	3	4	5	6/7	no tubercles	total
number of specimens	3	6	15	3	2	57	86
% number of specimens	3	7	17	3	2	66	100

gap number:		1	2	3	4
number of rings in gap	1	11			
	2	64	36	32	
	3	18	52	32	33
	4		12	19	67

(c) Specimens from localities in the Canberra Group

first tubercle on rachial ring:	2	3	4	5	6	no tubercles	total
number of specimens	4	4	5	1	4	23	41
% number of specimens	10	10	12	2	10	56	100

gap number:		1	2	3	4
number of rings in gap	1				
	2				20
	3	38	53	27	20
	4	56	33	46	40
	5				20

(d) Specimens from localities in the Fairbairn Group

first tubercle on rachial ring:	2	3	4	5	no tubercles	total
number of specimens	6	3	2	1	17	29
% number of specimens	21	11	7	3	59	100

gap number:		1	2	3	4
number of rings in gap	1	17	17		
	2	50	17		
	3	25	58	33	57
	4			42	29

(e) Specimens from localities in the Yarralumla Formation

first tubercle on rachial ring:	2	3	4	5	no tubercles	total
number of specimens	6	3	7	4	15	35
% number of specimens	17	9	20	11	43	100

gap number		1	2	3	4
number of rings in gap	1	25	20	11	
	2	35	35	13	
	3	35	40	38	70
	4				20
	5			19	

Encrinurus rothwellae (= *E. platynotus*, ? *E. incertus*)

SPECIMAN NUMBER	AMF 25356	35997	TYPE 36004	36006	36007		platynotus TYPE 28928		incertus TYPE 28922	
preserved as —	s, flexed	s	s	s	teratologic s		s		s	
A1	5.9*		8.8	8.0*			—			
A9	—		—	—			—			
A10	6.6*		10.5	9.9			—			
B	4.9		7.0	6.7*			—			
B1	5.6*		8.5	7.6*			—			
C2	—		1.5*	1.2*			—			
D10	2.4		3.6	3.4			—			
I = J1	12.0*		17.1	16.2			24.5*			
J2	5.6		6.6	6.5			—			
J4	—		3.2*	3.3			4.6			
J6	1.0		2.0	1.5			3.8			
K	—		4.4	4.0			6.1			
K2	4.3		5.2	5.3			—			
K'10	—		—	—			—			
Q	—	17.8	12.6	12.4*	—		14.9		—	
R	11.6	20.4	16.7	15.9	—		23.5*		—	
R1	3.5	6.0	4.5	4.1	—		6.9		—	
W	9.9	17.8	12.5	11.5*	13.5		18.8		18.7	
X	2.6*	4.5	3.4	3.2	—		5.0		4.9	
Y1	6.5	—	10.6	10.2*	—		—		12.0	
Z	—	—	11.9	—	14.4		—		13.1	
Z1	6.7	—	10.7	10.4*	—		—		12.7	
Nr. PLEURAE	11	>9	11	11?	—		>9		12 or 13	
NUMBER OF RACHIAL RINGS	ca 21	>17	24	22	—		>19		>17	
TUBERCLES ON RINGS —	2, 6, 10, 14, 17, 18	2, 3, 6, 10 (incomplete)	2, 3p, 6, 9, 10, 14, 18, 21	2?, 3p, 5, 9, 13, 17, 19			2, 5, 6, 9, 13, 16, 19		5, 8, 12	
A	—	—	—	—	—		—		—	
P	—	—	—	—	—		—		—	
COMMENTS	Bowning.	Bowning	dd mr.: 150 height ca 5.2cm Bowning	dd mr.: 151 height ca 5cm Bowning	ring 3 adaxially split		large facets on "L.T.B." Limestone Cr. Bowning		"U.T.B." "near Guendale" Bowning	

ABBREVNS: carapace; cephalon; D librigena; pygidium; S steinkern; C cast; cranidium; thorax; P partly testiferous; d calculated from half-width; * estimated value

Encrinurus etheridgei — Yarralumla material

SPECIMEN NUMBER preserved as —	AMF 4504A △ s	TYPE 4504B ⊖ s	4504C ◡ s	4504D ◡ s	4504 ◡ s	4504 ◡ s incomplete	4504 ⊖ c crushed	4504 ◡ c	4504 ◡ c	35867 ⊖ s
A1	10.3	ca 15*								—
A9	—	—								—
A10	11.1	20.1*								—
B	8.2	—								—
B1	9.9	—								—
C2	2.3	4.0				—				2.1
D10	2.6	4.2								2.4
I = J1	18.9	27.9								18.5*
J2	8.0	—								—
J4	4.5	6.8								3.6
J6	1.3	2.5								1.5
K	5.0	8.6								4.4
K2	6.7	9.0								5.7
K'10	—	—								—
Q	—	22.9	—	—	—	—	—	—	—	13.5
R	—	27.3*	—	—	—	—	—	—	—	16.5*
R1	—	9.1	—	—	—	—	—	—	—	5.5
W		22.5*	20.2	25.0*	7.7	27.0*	14.8	23.0*	13.0*	14.5*
X		7.0	5.6	6.9	2.1	6.0*	3.5	6.0*	—	4.0
Y1		23.4	18.6	16.9	6.7	—	—	—	—	—
Z		24.9	20.0*	17.9	7.4	21.7	13.3	18.0*	11.8	13.4
Z1		23.9	19.1*	17.3	7.0	—	—	—	—	12.8
Nr. PLEURAE		13	12 or 13	13	13	12	13 or 14	11 or 12	12	12?
NUMBER OF RACHIAL RINGS		32?	28?	32?	≥25	≥32	?	>25	?	>17
TUBERCLES ON RINGS —		3, 5, 6, 8, 10, 14, 19, 22 (all faint)	2?, 3, 5, 6, 9, 10, 11?, 16, 17?, 19, 24 (all faint)	3?, 5, 7, 10, 15 (all faint)	4, 5, 8, the obscure	8, 13 (v. faint)	?	?	?	3?, 5?, 8, 12
A		—		—	—	—	—	—	—	—
P		—	—	—	—	—	—	—	—	—
COMMENTS	coll. R. Etheridge	coll. R. Etheridge	coll. R. Etheridge	coll. R. Etheridge	coll. R. Etheridge	coll. R. Etheridge	coll. R. Etheridge	coll. R. Etheridge	coll. R. Etheridge	Mitchell labd. Boring; full. as Yarralumla

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ◡ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Encrinurus etheridgei [?] — Yass Syncline

SPECIMEN NUMBER	AMF 9565	25323	29358	29444	29445	29447	29449
preserved as —	▽ c	△ s (poor)	▽ c	▽ s (worn)	▽ c	▽ c	▽ c (worn)
A1		7.7					
A9		—					
A10		8.7					
B		6.2					
B1		7.2					
C2		1.7					
D10		1.8					
I (=J1)		13.6					
J2		5.3					
J4		2.6					
J6		1.2					
K		3.5					
K2		4.4					
K'10		—					
Q	—	—	—	—	—	—	—
R	—	—	—	—	—	—	—
R1	—	—	—	—	—	—	—
W	27.9		13.0*	12.0*	15.5*	20.0*	13.5
X	7.9		—	—	—	—	—
Y1	—		—	—	—	—	—
Z	20.8		14.5*	9.5*	14.0	18.0*	11.0
Z1	—		—	—	—	—	—
Nr PLEURAE	11 or 12		12?	—	11?	—	—
NUMBER OF RACHIAL RINGS	>29		>28	—	>25	—	—
TUBERCLES ON RINGS —	5?, 7?		?				
A	—						
P	—						
COMMENTS	A.J. Sheardy Nr. 166. Murrumbidgee R. (Boambolo?)	J. Mitchell coll. Bowning	Mitchell coll. Bowning	4.5mm high Mitchell coll. Bowning	8.0mm high Mitchell coll. Bowning	7mm high Mitchell coll. Bowning	6.5mm high Mitchell coll. Bowning

ABBREVNS: ⊖ carapace; ⌂ cephalon; △ cranidium; D librigena; ▽ pygidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Mitchell collection; Gurnett's Farm, near Bowring.

Encrinurus etheridgei? ("*loomesi*", "*perannulatus*", "*angustus*")

SPECIMEN NUMBER	AMF 28132	29441	28129	28131	28134	28135	28136	28137	28130	28133
	loomesi		*perannulatus*						*angustus*	
preserved as —	⌓ TYPE	⌓ (poor)	⌓	⌓	⌓ TYPE	⌓ S	⌓ S	⌓ S		
A1			(all very poorly preserved)							
A9										
A10										
B										
B1										
C2										
D10										
I = J1										
J2										
J4										
J6										
K										
K2										
K'10										
Q										
R										
R1										
W	12.6	14.7	22.0	13.2	11.1	11.7	7.9	13.9	14.6	9.9
X	4.0	4.5	6.4	3.9	3.8	—	—	3.6	3.9*	2.3*
Y1	12.2	14.1	18.8	8.4	8.0	—	—	11.2	15.6*	—
Z	13.4	15.0	20.0	—	8.9	9.8	6.6	12.0	17.4	—
Z1	12.6	14.3	19.0	8.6	8.3	—	—	11.5	16.9	12.0*
Nr. PLEURAE	14	12	13	12	13	?	11?	12	13	12?
NUMBER OF RACHIAL RINGS	35	31	ca 30	26?	>25	—	—	>30	>16	—
TUBERCLES ON RINGS —	nil	nil	5 v. faint	2? v. faint	4 faint				?	?
A										
P										
COMMENTS	dd nr. 14 5·6 mm high	dd nr. 36 6·2 mm high	large atic. facets					large atic. facets.	high	high

ABBREVNS: ⊖ carapace; ⌓ cephalon; △ cranidium; D libriganya; ▭ thorax; ⌓ pygidium; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Encrinurus etheridgei MITCHELL: PYGIDIAL TUBERCULATION.

List of B. M. R. specimens having sagittal tubercles. The tuberculate rachial rings are listed according to the standard system previously published.

Locality 7448 0016

CPC 18030 (figured specimen) -- 5, 6? (very faint), 14, 16 (faint), 18. (ca 28 rachial rings, 13 pleurae; E. sp. cf. etheridgei)

Locality 7448 0022

F 24259 --- 2?, 4?, 6?, 10?, 13? (specimen incomplete; identity uncertain)

Locality 7448 0023

F 24260 --- 6, 10?, 14, 17 (specimen incomplete; 13 pleurae, 27 or 28 rachial rings; identity uncertain)

Locality 7448 0045

F 24268 --- 7, 9?, 11?, 13? (specimen incomplete; sp. cf. etheridgei?)

Locality 7448 0046

F 24270 --- 9, 13?, 18? (specimen incomplete, identity uncertain)

Locality 7448 0047

F 24271 --- 6?, [illegible], 11, 14, 15?, 17?, [illegible], [illegible], [illegible] (13 pleurae, over 32 rachial rings; identity uncertain)

Locality 7448 0066

CPC 18024 (figured specimen) -- 2?, 7, 11?, [illegible], [illegible]/27 (faint) (13 pleurae, 39 rachial rings; sp. cf. etheridgei)

F 24330 --- 2, 7, 11?, 16 (all faint) (sp. cf. etheridgei)

F 24331 --- 3, 8?, 15, 20? (all faint) (13 pleurae, ca 37 rachial rings; sp. cf. etheridgei)

Locality 7448 0086

F 24393 --- 9, 14, 19, 24? (all faint)(13? pleurae, ca 35 rachial rings; sp. cf. etheridgei?)

Locality 7448 0087

F 24397 --- 10, 12, 14, 17, 20, 24 (11 or 12 pleurae, 26 rachial rings; sp. cf. etheridgei?)

Locality 7448 0123

F 24563 --- 2?, 5, 8, 12 (specimen incomplete, identity uncertain)

F 24565 --- 2?, 6?, 10p?, 20?, 24?, 28? (identity uncertain, possibly Coronocephalus urbis)

F 24567 --- 3p?, 4?, 5?, 8?, 9p?, 12?, 16?, 20?, 21? (11 or 12 pleurae, ca 29 rachial rings; identity uncertain, possibly C. urbis)

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae : type series

locality 7448 0101

CPC Collection

6/12/1976

SPECIMEN NUMBER	CPC 18461	18462	18463	18464	18465	18466	18467	18468	18470	18471
preserved as —	c incomplete	s incomplete	s slightly damaged	s	c incomplete	c incomplete	s	c incomplete	c incomplete	c incomplete
A1						6.9	6.2		5.4	4.9
A9						—	6.7		—	6.0
A10						—	6.4		—	5.4
B						5.4	5.3		4.5	4.0
B1						6.3	5.9		5.1	4.6
C2						1.9	1.3		1.3	1.6
D10						1.7	1.4		1.4	0.9
I - J1						—	12.4		—	10.0 d
J2						5.4	4.1		4.0	4.0
J4						6.5 d	5.2		4.7	5.2
J6						0.8	0.6		0.8	0.5
K						4.0	3.4		3.0	2.8*
K2						4.3	3.4		3.3	3.3
K'10						3.1	2.4		2.4	2.0
Q										
R										
R1										
W	6.2 d	12.5 d	11.8*	17.0*	18.1 d			8.0*		
X	4.2	3.4	3.2	5.1	5.0			2.9		
Y1	—	7.9	8.5*	12.1*	11.4			5.8*		
Z	—	9.5	9.6	13.7	12.5			6.8		
Z1	—	8.9	9.0	12.8	12.0			6.5		
Nr. PLEURAE	≥11	12	12?	13	12			11		
NUMBER OF RACHIAL RINGS	>13	21*	22*	27	25			23		
TUBERCLES ON RINGS —	—	—	—	—	—			—		
A										
P										
COMMENTS				13th pleura fused as post-rachial rib.	FIGURED SPECIMEN 12th pleura fused		4.5 mm high			FIGURED SPECIMEN

ABBREVNS: campyle; cephalon; D librigena; pygidium; cranidium; thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae : type series

locality 7448 0101

CPC collection

7/12/1976

SPECIMEN NUMBER	CPC 18472	18473	18475	18476	18477	18478	18479	18480	18481	18482
preserved as —	c incomplete		s	c incomplete	s incomplete	s incomplete	s incomplete	c incomplete	c incomplete	s incomplete
A_1	4.8								6.2	
A_9	5.6*								7.4	—
A_{10}	5.3*								6.8	
B	4.0								5.3	
B_1	4.6								5.9	
C_2	1.5								1.9	
D_{10}	1.2								1.2	
I ₀J_1	10.0*								—	
J_2	3.8*								—	
J_4	4.7								—	
J_6	0.6								0.7	
K	3.0 d								—	
K_2	3.0								—	
K'_{10}	2.1								—	
Q										
R										
R_1										
W		19.0	15.8 d	15.8*	16.0*	16.1	—	11.3 d		16.4 d
X		5.7	4.5	5.0	4.0	4.6	3.5	2.8		4.1
Y_1		14.6	11.0	11.3	10.6	—	9.2	7.2		10.1
Z		15.8	13.3	—	11.7	—	—	8.1		12.0*
Z_1		15.1	12.2	12.0	11.2	—	9.6	7.4		11.0*
Nr. PLEURAE		13	14?	12	13	>8	12	12		11*
HEIGHT OF RACHIS ABOVE		25	24	26	26*	>13	22*	26		>20
TUBERCLES ON RINGS —		—	—	—	—	—	—	—		3? (very low, doubtful)
A										
P										
COMMENTS					13th pleura fused as post-radial rib.				FIGURED SPECIMEN	

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae : type series

locality 7448 0101

CPC Collection

8/12/1976

SPECIMEN NUMBER	CPC 18483	18484	18485	18486	18487	18490 (A)	18490 (B)	18491	18492	18493
preserved as —	▽ s incomplete	▽ c	△ c incomplete	△ s incomplete	▽ c incomplete	△ c incomplete	△ s	△ c incomplete	▽ s incomplete	▽ s
A1			5.6	7.5		5.4	5.4	5.7		
A9			—	—		—	—	—		
A10			6.7	—		5.9	5.8	7.3		
B			4.3	6.1		4.5	4.6	4.5		
B1			5.2	6.9		5.3	5.3	5.4		
C2			1.5	—		1.3	1.0	1.4		
D10			1.2	—		1.2	1.3	1.6		
I = J1			12.0d	—		11.2d	10.8d	11.5*		
J2			4.3	5.5		4.3	4.1	4.4		
J4			5.1	—		4.8	5.0	5.2		
J6			1.0	—		0.7	0.7	0.8		
K			3.1	4.8d		3.0d	2.6	3.1		
K2			3.5	4.1		3.4	3.1	3.6		
K'10			2.4	3.2d		2.3	2.0	2.4		
Q										
R										
R1										
W	17.7d	16.5*			13.5*				14.2d	8.4
X	4.0	4.7			4.5				3.4	2.2
Y1	10.3	12.2			8.9				9.4*	5.4
Z	11.7	13.3			10.4				10.8	5.8
Z1	10.8	12.7			10.0				10.0	5.6
Nr. PLEURAE	12	13			11				12	12
NUMBER OF RACHIAL RINGS	27*	29			21				25	27*
TUBERCLES ON RINGS —	7	—			—				—	—
A										
P										
COMMENTS		15th pleura fused as post-rachial rib.				counterparts FIGURED SPECIMEN				

ABBREVNS: ⊖ carapace; ⌓ cephalon; △ cranidium; D librigena; ▭ thorax; ▽ pygidium; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae: type series

locality 7448 0101

CPC Collection

9-10/12/1976

SPECIMEN NUMBER	CPC Ⓑ 18494	18496	18497	18498	18499	18500	18501	18502	18503	18504
preserved as —	▽ c	△ c incomplete	△ c incomplete	▽ s damaged	△ s incomplete	▽ s incomplete	▽ c incomplete	▽ s	▽ s incomplete	▽ c incomplete
A1		6.0*	4.6		4.9					
A9		7.0*	—		—					
A10		6.4*	—		6.0*					
B		4.9*	3.8		4.0					
B1		5.6*	4.3		4.6					
C2		1.7	1.1		1.3					
D10		0.9	1.3		0.9					
I ∘J1		16.0d*	—		10.5d*					
J2		—	3.1		3.6*					
J4		6.4	4.0d		4.3					
J6		0.8	0.7		0.6					
K		4.1*	2.5d		2.4					
K2		4.4	2.8		2.9					
K'10		3.3	2.0		1.9					
Q										
R										
R1										
W	12.3d			14.2		11.9	17.3d	16.2*	18.0d	13.0d*
X	3.4			3.8*		3.4	4.6	4.6*	4.5	3.6
Y1	8.2			10.3		9.4	—	11.9	—	—
Z	9.1			11.2		—	—	13.1	—	—
Z1	8.9			10.4		9.6	—	12.4	—	—
Nr. PLEURAE	13			12		11?	>10	12	>10	>11
NUMBER OF RACHIAL RINGS	26*			23*		>22	>15	26*	>16	>24
TUBERCLES ON RINGS —	—			8?		—	—	—	—	—
A										
P										
COMMENTS	FIGURED SPECIMEN							12th pleura fused as first-radial rib.		

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae: type series

locality 7448 0109

CPC collection

10/12/1976

SPECIMEN NUMBER	CPC 18505	18506	18507	18508	18509	18511	18512	18513	18514	18515
preserved as —	▽ s incomplete	▽ s incomplete	▽ c incomplete	△ c incomplete	▽ c	▽ c incomplete	▽ s damaged	▽ c incomplete	△ s incomplete	△ c incomplete
A1				6.2					6.3	6.2
A9				—					—	—
A10				7.6					—	6.8*
B				5.1					5.3	5.0
B1				5.9					5.8	5.8
C2				1.7					1.7	1.4
D10				1.6					1.9	1.5
I ∘J1				12.9 d					—	—
J2				5.0 d					5.2	4.3
J4				5.7					7.0 d	5.3
J6				0.9					1.1	0.9
K				3.5					3.6	3.3
K2				4.1					3.8	3.6
K'10				2.9					2.8	2.7
Q										
R										
R1										
W	17.0 d	10.6	11.0*		10.0	16.0 d	15.0 d	—		
X	4.9	2.9	3.4		3.2	4.0*	3.4	4.0 d		
Y1	11.5	6.9	8.4		5.7	9.5*	9.9	10.0*		
Z	12.9	—	9.0		7.1	—	10.9	11.8		
Z1	12.0	7.6	8.6		6.8	10.5*	10.2	11.2		
Nr. PLEURAE	13	11	13		13	14	12	12		
NUMBER OF RACHIAL RINGS	26	25	27		25	30?	27*	27*		
TUBERCLES ON RINGS —	7? (faint)	—			—	—	—	—		
A										
P										
COMMENTS	13th pleura fused as post-rachial rib.	11th pleura fused	FIGURED SPECIMEN 13th pleura fused	FIGURED SPECIMEN		14th pleura fused				
ABBREVNS	⊖ camprae	△ cephalon △ conidium	D librigena ▭ thorax	▽ hypidium		S steinkern C cast	P partly fertiferous d calculated from half-width		* estimated value	

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae: type series

CPC + F collections locality 74480101 10/12/1976

SPECIMEN NUMBER	CPC 18516	CPC 18517	CPC (A) 18519	CPC (B) 18519	F24401	F24404	F24408	F24489	F24509	Specimen 74480101/38·1
preserved as —	△ c incomplete	▽ c incomplete	△ s incomplete	△ c incomplete	▽ s squashed	▽ s incomplete	△ c incomplete	▽ s damaged	▽ c incomplete	△ c incomplete
A1	6.5*		5.0	5.2			—			5.7
A9	—		—	—			—			—
A10	—		—	—			—			6.3
B	5.3		4.2	4.2			—			4.5
B1	6.2		4.8	4.8			—			5.2
C2	1.7		1.0	1.5			1.4			1.5
D10	1.7		1.4	1.0			1.3			1.3
I = J1	—		12.5*	—			9.2d			11.5*
J2	4.6		3.9	—			3.6*			4.5
J4	5.8*		4.8d	5.4d			5.0d			5.2
J6	0.8		0.5	0.8			0.6			0.6
K	3.3		3.8d	3.8d			2.8			3.0
K2	3.9		3.3	—			2.8			3.6
K'10	2.8		2.3	2.4*			2.2			2.3
Q										
R										
R1										
W		19.0d			—	—		5.0		
X		5.0			3.5	4.5		1.3		
Y1		—			—	11.1		—		
Z		—			12.0*	—		3.5		
Z1		—			11.0*	11.2		3.1		
Nr. PLEURAE		>11			12	12		10		
NUMBER OF RACHIAL AND TUBERCLES ON RHAS—		>24			25*	>20		>10		
		—			—	—		—		
A										
P										
COMMENTS			counterparts				identity uncertain			
ABBREVNS	⊖ carapace	△ cephalon △ cranidium	D librigena ▭ thorax	▽ pygidium	S steinkern C cast		P partly testiferous d calculated for half side		* estimated value	

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae : type series

CPC + F collections locality 7448 0177 10/12/1976

SPECIMEN NUMBER	CPC 18589	CPC 18590	CPC 18591 (A)	CPC 18592		F24681				
preserved as —	⬭ c incomplete	⬭ s damaged	⬭ s	⬭ s incomplete		⬭ s incomplete				
A1										
A9										
A10										
B										
B1										
C2										
D10										
I J1										
J2										
J4										
J6										
K										
K2										
K'10										
Q										
R										
R1										
W	7.7d	16.5d	16.0	21.0d		8.9d				
X	2.0d	4.0	4.0	5.6		2.0				
Y1	5.1	10.2	10.7*	15.3		5.1				
Z	—	12.1*	12.0	17.2		—				
Z1	5.5	11.0*	11.2	16.0		5.8				
Nr. PLEURAE	12	13	12	13		10				
NUMBER OF RACHIAL RIBS	24	23*	29	30		22				
THORAXAL OV RIBS	—	—	—	7 (low)		4? (low)				
A										
P										
COMMENTS		FIGURED SPECIMEN	FIGURED SPECIMEN	13th pleura fused as post-rachial rib		identity uncertain				

ABBREVNS: ⊖ carapace; ⬭ cephalon; D librigena; ⬭ pygidium; S steinkern; C cast; ⬭ cranidium; ▭ thorax; P partly testiferous; d calculated from half-width; * estimated value

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae: type series

CPC collection — locality 7448 0285 (HOLOTYPE) — 21-22/12/1976

SPECIMEN NUMBER	CPC 18599	18600 (A)	18600 (C)	18601	18602	18604	18605	18606	18607	18608
preserved as —	c incomplete	s incomplete	c incomplete	s incomplete	c incomplete	c incomplete	s slightly damaged	s distorted	s incomplete	c incomplete
A1	—	5.3*	—			5.6	6.1			6.0
A9	—	—	—			—	7.0*			7.0
A10	—	6.0*	—			—	—			6.8
B	—	4.5	—			4.7	4.9			4.9
B1	—	5.0	—			5.4	5.5			5.8
C2	1.5	1.4	1.6			1.8	1.9			1.6
D10	1.2	1.5	1.2			1.0	1.3			1.1
I ∘J1	—	10.5d	10.7			—	11.9			13.0d
J2	5.1	3.8	—			4.8	4.4			4.4
J4	6.0	4.4*	4.8			5.4	5.3			5.5
J6	0.8	0.7	0.5			0.7	0.7			0.9
K	4.0	2.7	3.0			3.8d	3.6			3.2
K2	4.1	2.9	3.1			3.9	3.5			3.6
K'10	3.0	2.1	2.3			2.7	2.5*			2.5*
Q										
R										
R1										
W				16.8d	17.5d			18.7d	16.3d	
X				4.3	4.4			4.4	4.0	
Y1				11.0*	11.0*			11.3	9.4*	
Z				12.2	12.4			12.6*	10.4	
Z1				11.2	11.7			11.5*	9.7	
Nº PLEURAE				11	13			12	12	
NUMBER OF RACHIAL RING				25*	26*			>20	23*	
TUBERCLES ON RINGS —				7 (low)	—			4, 8. (faint)	9 (very faint)	
A										
P										
COMMENTS		counterparts				FIGURED SPECIMEN				FIGURED SPECIMEN

ABBREVS: ⊖ carapace; ⌓ cephalon; D librigenae; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; * estimated value; d calculated from half-width

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinuras civicae: type series

CPC + F collections locality 7448 0285 22/12/1976

SPECIMEN NUMBER	CPC 18610	CPC 18611		F 24725						
preserved as —	▽ s incomplete	▽ s incomplete		⌓ s poor preserva						
A1				4.9						
A9				5.5						
A10				5.4						
B				3.8						
B1				4.5						
C2				1.1						
D10				1.4						
I ∘J1				9.5						
J2				3.2						
J4				4.1						
J6				0.6						
K				2.5						
K2				2.5						
K'10				1.8						
Q										
R										
R1										
W	17.0d*	17.3d								
X	4.1	4.5								
Y1	—	13.0								
Z	13.5*	—								
Z1	12.8*	13.5								
Nº PLEURAE	≥ 11	12 (or 13)								
NUMBER OF RACHIS RINGS	> 18	27								
TUBERCLES ON RINGS —	—	—								
A										
P										
COMMENTS		possible small fused 13th pleura								
ABBREVS	⊖ carapace	⌓ cephalon ▽ librigena ▽ rigidum ⌓ condition ▭ thorax				S steinkern C cast	P partly testiferous d calculated from half-width		☆ estimated value	

DATA SHEET — ENCRINURID MEASUREMENTS

Encrinurus civicae : Sydney Univ. specimens

Mumbil Fm.?, Orange district, N.S.W.

SU 22/12/1976

SPECIMEN NUMBER preserved as —	P929A c incomplete	P929B c incomplete								
A1	10.5	—								
A9	14.4	—								
A10	13.8	—								
B	8.4	—								
B1	9.5	—								
C2	2.9	1.8								
D10	2.3	1.3								
I J1	20.0*	17.9								
J2	8.1	—								
J4	8.9	—								
J6	1.6	1.8								
K	6.2	4.5								
K2	6.7	—								
K'10	4.7	3.5 d								
Q		—								
R		5.0								
R1		—								
W		—								
X		3.2 —	—							
Y1		—								
Z		—								
Z1		—								
Nr. PLEURAE		—								
NUMBER OF RACHIAL TUBERCLES ON RAMUS —		—								
		3, 5, 9 (all very faint)								
A										
P										
COMMENTS	FIGURED SPECIMEN									
ABBREVIATIONS	compact	cephalon D librigena pygidium cranidium thorax			S sutural C cast	P				value

Encrinurus robustus (= *E. frontalis*)

SPECIMEN NUMBER preserved as —	AMF 28117 (TYPE) ⊖ s	AMF 28121 (TYPE) ⊖ c		AMF (frontalis TYPE) 28119 △ s		MMF 9398 △ s		Sydney University SU P — ▽ s	SU P — ▽ s
A_1	12.8	12.5?		8.3		12.3			
A_9	16.7	18?		—		—			
A_{10}	15.3	15.4		8.9*		15.3			
B	10.0	10.1		6.9		10.3			
B_1	11.3	11.6		8.1		11.7			
C_2	2.5	2.6		1.4		—			
D_{10}	3.5	3.0		2.1		3.5			
$I = J_1$	32.8	36*		18.1*		34.4 d			
J_2	9.6*	10.0*		7.9		11.9			
J_4	5.8	6.4		3.8*		5.8			
J_6	3.2	3.0		2.5		3.3			
K	8.4	8.9		5.3*		7.6			
K_2	9.2	—		6.5		10.0			
K'_{10}	5.9	6.5		—		5.9			
Q	19*	—		—		—			
R	31.9	—		—		—			
R_1	9.5	9.7		—		—			
W	26.2							26.1	26.2
X	6.9							6.2	6.8
Y_1	17.5							15.7*	15.5
Z	18.8							—	—
Z_1	17.8							16.8	19.4
Nr. PLEURAE	12							12	11
NUMBER OF RACHIAL RINGS	24							>21	23
TUBERCLES ON RINGS —								4 6P 7 11 15 18	3P? 6 8P? 10 12P? 14 17 18
A	14.2								
P	49.6*								
COMMENTS	counterparts Bowning, Mitchell coll.			Mille Tilcite bed, Bowning Mitchell collⁿ		C.F. Jenkins collⁿ, local. F^a, Bowning		C.F. Jenkins collⁿ, locality F^a, Bowning.	

ABBREVNS: ⊖ carapace; ⌂ cephalon; △ cranidium; D librigena; ▭ thorax; ▽ pygidium; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Encrinurus silverdalensis

SPECIMEN NUMBER preserved as —	AMF 27439A	27439B	28123	35996A	TYPE 35996B	35999				
	▽	△c	⊖	▽	△	▽				
A1		13.3*			—					
A9		—			—					
A10		—			—					
B		10.6*			—					
B1		12.7*			—					
C2		—			—					
D10		—			4.1					
I = J1		29.8*			31.0					
J2		13.0*			—					
J4		7.0*			7.1					
J6		—			3.2					
K		9.0*			8.9					
K2		10.8*			12.2*					
K'10		—			—					
Q										
R			22*							
R1			6.6							
W	29.2		18.3	16.5		22.7*				
X	7.9		4.9	4.4		6.6*				
Y1	21.8		13.5	12.5		15.3				
Z	24.0		14.9*	14.0*		16.7				
Z1	23.1		13.9	13.3		16.2				
Nr. PLEURAE	12		13	12		12				
NUMBER OF RACHIAL RINGS	33		29	27		28				
TUBERCLES ON RINGS —	3 4P 5P 6 8P 10 13 14P 15P 17 21 26		3 6 10 14 18 22 26	2 3 5 6 9 12 13 16 20 25		2 3 6 8 10? 12 14? 16 21 25				
A										
P										
COMMENTS	Mitchell Colln, old nr. 138 Silverdale, near Bowning	Mitchell colln Silverdale	Mitchell, 1924 Silverdale	Mitchell colln Nr. 134 Silverdale	Mitchell colln Silverdale	Mitchell colln Nr. 140 Silverdale				

ABBREVNS: ⊖ carapace; ⌓ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; * estimated value; P partly testiferous; d calculated from half-width

Encrinurus borenorensis — type series

24/8/1977

SPECIMEN NUMBER	AMF TYPE 42694	42697	42703	42885	42896	42904	42908	43053	44315
preserved as —	⌂ s	△ c	▽ s	▽ s	△ s	▽ c	▽ s	▽ s	▽ c
A1	23.2	ca 23*			19.2				
A9	30.5	—			—				
A10	29.9	—			22.1				
B	20.6	ca 19*			16.7				
B1	23.2	ca 22*			19.2				
C2	4.4	3.5			4.2				
D10	6.7*	6.2			4.6				
I = J1	ca 48*	—			40.5				
J2	22.6	21.5			18.9				
J4	23.2*	22.0			19.0				
J6	3.6	4.0			3.7				
K	13.2	12.4			10.6				
K2	18.7	18.5			15.5				
K'10	9.3	9.9			7.8				
Q	—	—	—	—	—	—	—	—	—
R	—	—	—	—	—	—	—	—	—
R1	—	—	—	—	—	—	—	—	—
W			ca 40*	ca 22*		23.5*	ca 24*	ca 30*	ca 35*
X			10.5	5.0		7.0	6.8	8.6*	10.0*
Y1			24.6	16.4		13.6	17.2	19.3	22.7*
Z			—	—		—	19.5	—	—
Z1			—	—		14.8	18.8	21.3	24.1
Nr. PLEURAE			10	10?		10	10	10	10
NUMBER OF RACHIAL RINGS			23	>20		22?	23?	24?	23?
TUBERCLES ON RINGS — A			3 4P 5 6P 7 10 11 15 16? 19? 20?	2P? 3+3P 5P? 6 10 11 15		3? 6? 10? 12?	2P 3+3P 6 7 10P 11 15?	3+3P 5P 6P 7 10 11 15 16P 19 22?	3P? 5P 6 9 10 13 16 17
P									
COMMENTS				teratogenic					

ABBREVNS: ⊖ carapace; ⌂ cephalon; D librigena; ▽ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Encrinurus borenorensis

24/8/1977

SPECIMEN NUMBER preserved as —	AMF 42690 △ c	AM unnumbered ⌓ s.								
A1	20.6									
A9	—									
A10	—									
B	17.6									
B1	20.1									
C2	3.6									
D10	4.6									
I =J1	ca 36*									
J2	18.7									
J4	19.3									
J6	3.5									
K	10.4									
K2	16.0									
K'10	8.4									
Q	—	—								
R	—	—								
R1	—	—								
W		26.5 d.								
X		7.7*								
Y1		16.0								
Z		—								
Z1		17.1								
Nr. PLEURAE		10								
NUMBER OF RACHIAL RINGS		24?								
TUBERCLES ON RINGS —		3 P? 5 9 10 13 14 17								
A										
P										
COMMENTS										

ABBREVNS: ⊖ carapace; ⌓ cephalon; D librigena; ⌓ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Batocara bowningi

6/1/1976

SPECIMEN NUMBER preserved as —	TYPE In 27609 △ s	AMF 2483 ▽ s (poor)	5133 △ s	25310 ◬ s	25331 ▽ s	25332 ⊖ s	25333 △ s	25338 ⬠ s	25340 △ s	25341 △ s
A1	9.5		11.3*	10.4		9.2	11.3*	10.1	10.7	9.6
A9	—			11.6		—	12.8*	—	—	—
A10	12.3			10.6		—	12.6	13.3	14.2	12.1*
B	7.7			7.6		7.5	9.4*	8.2	8.9	8.0
B1	9.1			9.5		8.5	10.6*	9.3	10.6	9.0
C2	1.7			1.8		1.7	2.0	2.0	1.7	1.9
D10	2.3			2.5		1.8	2.2	2.5	2.3	2.5
I = J1	19.3		19.1*	20.5		—	—	19.2*	22.7	20?*
J2	8.3			7.4		6.8*	7.5	7.6	9.8	7.9
J4	—			—		—	—	—	—	—
J6	2.5			2.4		1.9	2.9	2.8	3.5	2.9
K	5.3			5.0		5.0*	5.1	5.2*	5.7	4.6
K2	6.9			6.0		5.3*	6.5*	6.8	8.1	6.4
K'10	4.3			3.8	d	3.7*	3.9	3.9	4.1	3.6
Q	—			—	—	11.3	—	13.4	—	—
R	—			—	—	16.4	—	18.5*	—	—
R1	—			—	—	4.8	—	5.5	—	—
W					19.3	14.3				
X					4.6	3.5				
Y1					13.2	8.1				
Z		15.7			14.5	9.1*				
Z1					13.6	8.5				
Nr. PLEURAE		11			10	11				
NUMBER OF RACHIAL RINGS		>16			26	21				
TUBERCLES ON RINGS —					2 5 8 11 15P 19 22	2 4 7 9 12 16 19				
A							17.5			
P							—			
COMMENTS	in BM(NH) from Bowning	Yass.	Bowning [redacted] Mitchell Coll. Bowning		Mitchell Coll. Acc. nr. 127 Bowning	Mitchell Coll. Acc. nr. 116 Bowning	Mitchell Coll. Acc. nr. 124 Bowning	Mitchell Coll. Acc. nr. 125 Bowning	Mitchell Coll. Acc. nr. 126 Bowning	Mitchell Coll. Acc. nr. 126 Bowning

ABBREVNS. ⊖ carapace △ cephalon △ cranidium D librigena ▽ pygidium ▭ thorax S steinkern C cast P partly testiferous d calculated from half-width * estimated value

Batocara bowningi — Mitchell Collection; from Bowning 6/1/1976

SPECIMEN NUMBER preserved as	AMF 25345 S	25347 S squashed	25384 S	26203A C damaged	26203B S	27448 C	27500 C	28140 A+B A S	28141 S	28147 C
A1	12.0	9.4		—	10.6			11.0*		—
A9	—	—		—	—			—		—
A10	15.5	12.0*		—	13.7			13.1*		—
B	10.6	7.9		—	8.6			9.0*		—
B1	11.7	8.7		—	9.9			10.2*		—
C2	2.0	2.3		2.4	2.1			2.5		2.4
D10	3.0	2.4		2.3	3.0			2.5		2.4
I = J1	24.3	ca 25*		—	25.3			24.5*		24.0*
J2	10.6	9.1		—	9.5*			9.6		—
J4	—	—		—	—			—		—
J6	3.2	3.0		2.8	3.3			3.6		2.6
K	7.0	5.6		5.2*	6.0			6.1		6.1
K2	8.6	7.5		—	7.6			7.5		8.0*
K'10	5.5	4.4		4.2*	4.7			4.5		4.9*
Q	17.0	12.9		—	—			—		12.9
R	23.6	20.7		—	23.1			—		20*
R1	7.3	6.0		—	6.5			—		6.5
W	19.9	17.8	18.3	23.0*		22.0*	—	19.5*	20.3	17.2?*
X	5.3	4.0*	4.6	5.8*		6.0	4.2	4.4	—	4.8
Y1	—	12.0	11.7	14.3		—	—	13.0	—	11.8
Z	—	13.5	13.6	16.2*		14.9*	12.5*	14.4	16.8	13.0
Z1	—	12.4	12.6	15.6		—	11.7*	13.4	—	12.4
Nr. PLEURAE	>8	10	11	10		10	10	11	10	10
NUMBER OF RACHIAL RINGS	>16	21	23	21		>23	24	25?	?	21
TUBERCLES ON RINGS —	2 5 8 11 14	1 2+2P 4 7 10 13 17 20	2+2P 3 6 9 12 13 16 17 20	2 5 7 11		2 5 8	2 5 8 11 14 18 21	2 3 5 8 11 15? 18??	2 5 8 11 15	2 5 9 12 18
A										
P										
COMMENTS	dd nr. 129		was identified as E. mitchelli (Minahan's Selection)			was identified as E. mitchelli				

ABBREVNS: carapace; cephalon; D librigena; pygidium; cranidium; thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Batocara bowningi — Mitchell collection, Bowning area. 6/1/1976

SPECIMEN NUMBER	AMF 28148	28150	28151	28152	28153	28162	28163	28164	29142	29143
preserved as —	S	S	S	S	S	S	S	S	S	C
A1		9.9*		—		7.0*	8.3	9.5*		11.6
A9		—		—		—	—	—		13.1
A10		—		—		8.2	10.0	10.7		12.4
B		8.1		—		5.8	7.1	7.5		9.7
B1		8.8*		—		6.7*	8.1	8.9*		11.3
C2		2.2		1.3		1.7	2.0	1.9		2.5
D10		2.7		1.3		2.0	2.3	2.1		1.6
I =J1		—		11.4		14.2*	18.6	17.7		23.5*
J2		7.1		5.6*		6.3	7.7	7.9		9.0*
J4		—		—		—	—	—		—
J6		3.0		1.6		2.1	2.3	2.5		2.3
K		4.1		2.5		3.8	5.0	4.8		5.5
K2		5.2		4.4		5.0	6.3	6.4		6.8*
K'10		3.3		1.9		3.0	3.9	3.7		4.1
Q	13.3*						12.2			—
R	20.1						17.5			19.1
R1	5.8						5.1			5.9
W	16.7		16.9		13.0				22.6	
X	4.3		4.3		3.5				—	
Y1	10.2		10.9		8.2				—	
Z	11.5*		12.7		—				—	
Z1	10.6		11.9		8.5				15.5	
Nr. PLEURAE	10		10		10				10	
NUMBER OF RACHIAL RINGS	23		22		22				>19	
TUBERCLES ON RINGS—	2 5 8 11 15 18		2 5 8 11 15 19		3 9 12 16 19 21				2 4 7 10 14 17	
A										12.3
P										
COMMENTS						Old label:- "B.Ck. 17. H/83"				

ABBREVNS: carapace; cephalon; D librigena; pygidium; cranidium; thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Batocara bowningi — Mitchell collection, Bowning area. 6/1/76

SPECIMEN NUMBER preserved as —	AMF 29144 ⊖ C	29146 ⊖ C	29149 glabella S	29151 ⊖ S (damaged)	29152 ⌂ S	29155 △ S	29156 ⌔ S	29159 ⊖ S (poor)	29160 ⌔ S	29161 ⌔ S
A1	8.2	6.8	9.6*		9.1	4.8				
A9	—	—	—		10.1	—				
A10	—	7.9	—		9.6	4.9				
B	6.5	5.7	7.8		7.7	3.8				
B1	7.6	6.6	9.3		8.6	4.5				
C2	1.9	1.5	—		1.6	1.1				
D10	1.7	1.5	—		2.2	1.2				
I = J1	—	15.0*	—		17.6	10.7				
J2	5.6*	5.9	6.9*		6.5	4.5				
J4	—	—	—		—	—				
J6	1.8	1.6	—		1.6	1.5				
K	4.1	3.8	4.9		4.7	2.9				
K2	4.5	4.7	6.2*		5.6	3.6				
K'10	3.0	2.9	3.6		3.5	2.0				
Q	—	7.5								
R	13.0*	14.4*								
R1	4.2	3.9								
W	12.2	—		12.0			17.0	15.8	22.7	22.0
X	3.6	2.8		—			4.5	—	5.1	5.5
Y1	8.0	—		—			11.1	—	11.9	15.1
Z	9.0*	—		—			12.7	—	13.6	16.5
Z1	8.5	—		9.2			11.6	10.2	13.2	15.5
Nr PLEURAE	10	>8		9			10	9	10	10
NUMBER OF RACHIAL RINGS	22	>16		?			22	>15	22	>18
TUBERCLES ON RINGS—	2 3 5 8 12/13 18	2 5 8 12		?			2 4 5 7 10 14 16 17	2 5 7/8 11 15	2 3 5 9 12 16 19	2 3 5 8 12 15
A					9.6					
P										
COMMENTS										

ABBREVNS. ⊖ carapace ⌂ cephalon D librigena ⌔ pygidium S steinkern C cast △ cranidium ▭ thorax P partly testiferous d calculated from half-width * estimated value

Batocara bowringi : Bowring area 6/1/1976

SPECIMEN NUMBER preserved as —	AMF 29162 △ s	29163 ⬡ s (damaged)	35860 ⊖ s	35974 △ s (damaged)	36100 ⊖ s (damaged)	51784 ⊖ c		MMF 491 A △ s	MMF 491 C ⬡	MMF 491 D ⬭ s
A1	8.4	11.1	11.9	10.9	8.8	11.6		10.5		
A9	—	12.9?*	—	—	—	—		—		
A10	11.1	12.8?*	13.2	12.7*	11.4	13.0		12.0		
B	7.2	9.0	10.0	9.1	7.2	9.0		—		
B1	8.3	10.8	11.3	10.3	8.5	10.8		—		
C2	1.9	1.9	—	2.3	—	2.3		—		
D10	2.3	2.8	2.8	2.6	2.4	2.3		2.4		
I = J1	18.9	—	24.5*	—	—	25.0*		20.8		
J2	7.5	8.8	10.8*	8.9	8.0	9.2		—		
J4	—	—	—	—	—	—		—		
J6	2.4	3.1	3.4	2.8	2.4	2.5		3.0		
K	4.5	5.4	7.5*	6.0	5.4	5.9		5.5		
K2	5.9	7.0	8.3*	7.1	6.4*	7.9		8.1		
K'10	3.6	4.1	5.8*	4.8	3.8*	4.5		—		
Q			13.3		12.9	14.7				
R			24.5		—	22.3				
R1			7.9		5.6	6.9				
W			20.0		—	18.7			10.7	11.8
X			5.5		4.0	5.3			2.5	2.9
Y1			12.4		—	13.5			6.3	7.2
Z			—		—	—			7.8	8.5
Z1			12.8		—	14.0			6.9	7.9
Nr. PLEURAE			10		>8	10			10	10
NUMBER OF RACHIAL RINGS			21		>13	22			20	21
TUBERCLES ON RINGS —			3 5 6 9 12 13 16		2 5 8 11	5 9 12 16			1P 3 6 9/10 13 17 19	1mP 2D 3 4 5 8 11 15P
A		11.2?								
P										
COMMENTS	Mitchell colln	Mitchell colln.	Mitchell colln.	Mitchell colln.	Mitchell colln	Mr. Horne, don. 1965				

ABBREVNS: ⊖ carapace; △ cephalon; D librigena; ⬡ pygidium; △ cranidium; ▭ thorax; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

Batocara bowringi

SPECIMEN NUMBER preserved as —	MMF 491E ▽ s	491I △ c (damaged)	491K ▽ c	MMF 507 ⊖ s						
A1		6.8		9.4*						
A9		—		—						
A10		8.4		9.8*						
B		—		—						
B1		—		—						
C2		—		0.9						
D10		1.6		2.0						
I = J1		15.0*		21.5*						
J2		—		—						
J4		—		—						
J6		1.6		1.9						
K		4.0		4.4*						
K2		6.0		—						
K'10		—		—						
Q										
R										
R1										
W	7.9		9.0*							
X	2.3		3.3							
Y1	4.9		5.8							
Z	6.1		—							
Z1	5.7		7.0*							
Nº PLEURAE	10		10							
NUMBER OF RACHIAL RINGS	20		22*							
TUBERCLES ON RINGS—	3 5 8 11 14 15 17		5 9 13 17							
A										
P										
COMMENTS	Bowring	S is MMF 14977		Bowring						

ABBREVNS: ⊖ carapace; ⌂ cephalon; △ cranidium; D librigena; ▭ thorax; ▽ pygidium; S steinkern; C cast; P partly testiferous; d calculated from half-width; * estimated value

MICROFICHE 2 FOLLOWS --------

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Glabellar tuberculation

species: *Coronocephalus urbis*

date: 26/11/1976

	Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
		0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
FIG.	CPC 18031	O	O		O							O	?	D							O	O	D		O					O	?			O				O			
	bc. 74480051																				O									O											
	CPC 18037	O	O	O	D							O	O	D							O	O	D							O	O			O		O		O			
	bc. 74480101																													O											
	18038	O	O	O	D							O	O	D							O	O	D							O	O			O		lost					
	18039		O	O	D							O	O	D							O	O	D							O	O			O				O			
	18041		O	?	D							O	O	D							O	O	D							O	O			O				O			
	18044	O	O	O	D							O	O	D							O	O	D							O	O			O				O			
	18046		O	O	O							O	O	O							O	O	O							O	O			O				O			
	18047		O	O	D							O	O	D							O	O	D							O	O			O				O			
	18049		O	O	D							O	O	D							O	O	D							O	O					lost					
	F24417		O	O	O							O	O	D							O	O	D							O	O			O				O			
	CPC 18051		O	O	O							O	O	D							O	O	D							O	O		R	O		lost					
	18058		O	O	D							O	O	O							O	O	D							O	O	2		?		lost					
	18060		O	O	O	D						O	O	D							O	O	D							O	O	O	O			lost					
	18063		O	O	D							O	O	D							O	O	D							O	O		O	O		asymmetric		O			
	18065	lost										O	O	D							O	O	D							O	O			O				O			
	18066		O	O	D							O	O	D							O	O	D							O	O			O				O			

Glabellar tuberculation

species: *Coronocephalus urbis*

date: 26/11/1976

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
CPC 18072		O	o	D							o	O	D							O	o	D						asymmetric											
Ex. 74480101																												O		o	L		O	←	lost	→			
18075	←	lost	→								o	o	D							o	o	D						O			R		O				O		
18078		o	o	D							o	O	D							o	O	D						O		o			O				O		
18083		O	o	D							o	o	D							o	O	D						O		o			O				O		
18086		O	o	D							o	O	D							o	o	D						O		o			O				O		
18090	←	lost	→								o	o	D							o	O	D						—	—	—	—	asymmetric						—	→
18091		O	o	D							o	O	D							o	O	D						O		o			O				O		
18095	←	lost	→								o	o	D							o	O	D						O			o		O				O		
18099	o	o	o	D							o	o	D							o	O	D						O			o		O				O		
18100		O	o	D							O	O	D?							O	O	D						O		←				lost		→			
18428		O	o	D							o	D	D							O	o	D						O		o			O				O		
18429		O	o	D							O R	o	D							O	o	D						O			O		O	o			O		
FIG. 18430		O	O R	D							O	o	D							O	o	D						O		o			O				O		
18432		O	o	D							o	o	D							o	o	D						O		o			O				O		
18433		O	o	D							o	o	D							o	o	D						O			R		O				O		
18436		O	o	D						o	O	O	D							o	O	D						O		o			O		L				

Glabellar tuberculation

species: *Coronocephalus urbis*

date: 26/11/1976

	Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
		0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
	F 24518 loc. 74480101		O	o	D							O	O	D							O	O	D							O O	o			O				O			
	CPC 18449		O	O	D							O	O	D							O	o	D							O O		o		O	o			O			
FIG.	18458	?	O	O	D							O	R	D							O	O	D						←	O O	o	—	O	O	— asymmetric —					→	
	18528 loc. 74480177		O	o	O							O	O	D							O	O	D							O O		L	o	O				O			
	18531		O	O	D							O	o	D							O	O	D							O O	o	o		O			o	O			
FIG.	18532		O	o	D							o	O	D							O	O	D							O O	O		o	O				O			
	18534		O	o	D							o	O	D							O	O	D							O O		o	o	O	o			O			
	18536		O	o	D							o	O	D							O	O	D						←	O O	—	o	o	O	— asymmetric			O		→	
	18538		O	o	D							O	o	D							O	O	D							O O	o			O				O			
	18540		O	O	D							O	O	D							O	O	D						(A)	O O		o		O	o			O			
	18541		O	o	D							o	O	D							O	O	D						←	O O	o	—		O	— asymmetric			O		→	
FIG.	18549 (very small)		O	o	o							?	?	?							O	O	D							O O				O				?			
	18553		O	o	D							O	O	D							O	O	D							O O		R		O				O			
	18554	← lost →										O f O		D							O	O f D						O	O		o		O				o			
	18558 (very small)		O	o	o							O		D							O		D							O O	o		←		obscure					→	
	18563		O	O	D							O	O	D							O	O	D							O O		o		O				O			

Glabellar tuberculation

species: *Coronocephalus urbis*

date: 26/11/1976

	Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
		0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
	CPC 18568 loc. 74480177		O	O	o							O	O	D							O	O	D							O	o	R		O		obscure					
	18570		O	O	D							O	O	D							O	o	D							O	o			O				o	O		
FIG.	18572 HOLOTYPE		O	O	D							O	O	D							O	O	D							O	o	O		O	o				O		
	18573		O	o	o							O	L	D							O	R?	D							obscure								O		
	18580		O	O	D							O	O	D							O	O	D							O	o	o		O					O		
FIG.	18581 very small		O	O	D							O	O	D							O	O	D							O				O					O		
	18583		O	O	o							O	O	D							O	R	D							O	o	o		O	o				O		
	18594 loc. 74480285		O	O	D							O	O	D							O	O	D							very asymmetric											
																														L R L	O			O				O		
	18595 same loc.		?	?	?							O	O	D							O	O	D							O	O		O	O	O	L		O		
	NMP 1241 Cavombat Fm.		O	O	D							O	O	D							O	O	D							O	O		O		O				O		

Glabellar tuberculation : Australian Museum specimens

species: *Encrinurus mitchelli* Foerste, 1888

date:

Specimen Nr. etc.	lobe L1				furrow S1				lobe L2			furrow S2				lobe L3				furrow S3			F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1
AM F2479 Bowning NSW.																															irregular triad ?					
AM F3213 Hollows Corner, Yass																															irregular triad					
AM F21242 Bowning																									lost											
AM F25275 Bowning																																				
AM F25278 Bowning																											lost									
AM F25283 Bowning																																				
AM F25285A Bowning																											lost									
——— B																											obscure									
AM F25293 Bowning																																				
AM F25299 Bowning																											lost									
AM F25306 Bowning																											lost									
AM F25308 Bowning																											obscure									
AM F25334 Bowning						?																							?				?			
AM F25342 Bowning																																				
AM F25344 Bowning																											obscure									
AM F25346 Bowning																											lost									

Glabellar tuberculation — Australian Museum specimens

species: *Encrinurus mitchelli* Foerste, 1888 date:

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
AM F25348 Bowning	O		O	O	O						O	O	O		O				O	O	O	O		O		O		O	O		O		O		O		O			
AM F25353 Bowning	O		O	O	O	O					O	O	O		O				O	O	O	O		O		O			O	O			O		O		O		O	
AM F25385 Bowning	O		O	O	O	?					O	O	O		O				O	O	O	O		O		O		←		lost									→	
AM F25386 Bowning	O		O	O	O	O					O	O	O		O				O	O	O	O		O		O		O	O		O	O		O		O		O		O
AM F25389 Bowning	O		O	O	O						O	O	O		O				O	O	O	O		O		O		O	O		O		O		O		O		O	
AM F25393 Bowning	O		O	O	O	O					O	O	O		O	O			O	O	O	O		O		O			?	?			?	?	?		?			
AM F26199 Bowning	O		O	O	O	O					O	O	O		O				O	O	O	R	O	O		O			O		O		O	O	O		O			
AM F26207 Bowning	O		O	O	O						O	O	O		O				O	O	O	L	O	O		O	L	O	O		O		O		O		O			
AM F26379 Bowning	O		O	O	O						O	O	O		O	L	L		O	O	O	O		O		O			O	?			?	←	lost		→			
AM F26380 Bowning	O		O	O	O						O	O	O		O				O	O	O	R	O	O		O		?	?		?		?		?	←	lost	→		
AM F27445 Bowning	O		O	O	O	O					O	O	O		O				O	O	O	O		O		O			O	O			O		O		O		O	
AMF27446 A Bowning	O		O	O	O						O	O	O		O				O	R	O	O		O		O			O	O			O	O			O		O	
——— B Bowning: juvenile?	O	L		O							O	O	O		O				O	O	O	O		?		O		?	?		?		?		?	←	lost	→		
AMF27472 A Bowning	O		O	O	O	O					O	O	O		O		O		O	O	O	R	O	O		O			O		O	?	O		O		O			
AM F27499 Bowning	O		O	O	O						O	O	O		O		L		O	O	O	O		O		O		O	O		O	O		O		O		O	?	
AM F27841 Bowning	O		O	O	O	O					O	O	O		O			R	O	O	O	O		O		O		←		lost									→	

Glabellar tuberculation — Australian Museum & National Museum specimens.

species: *Encrinurus mitchelli* Foerste, 1888 date:

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2				furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
AM F28154 A Bowning		O	o	O		o					O	o	O	o				o	O	o	O		O		?			O	o			O		O		O		O	
AM F28154 B Bowning		O	o	O							O	o	O	o				o	O	o	O		O					O	← lost →									
——— E		O	o	O		o					O	o	O	o	L			o	O	o	O		O					O	o	O		O		O		O			
AM F28519 Bowning		O	o	O		o					O	o	O					o	O	L	O		O					O		O		O	← lost →						
AM F29054 Bowning		O	o	O		o					O	o	O	o				o	O	o	O		O				← lost →											
AM F29055 Bowning		O	o	O		o					O	o	O	o				o	O	o	O		O					O	O	O		O		O		O			
AM F29056 Bowning: juvenile?		O	L	O		o					O	o	O	o				o	O	R	O		O					?	?			?	?			?			
AM F35995 Gurnett's farm ("perannulatus", 1924)		O		O		O				o	O		O	o				o	O	?	O		o		O		← obscure →											
NM P7042 Yass		O	O	o		o					O	O	O	o	L		R	o	O	R	O		O		O		o	O		O		o	O	o		O		?	
NM P7060 Limestone Ck., Yass		O	O	o							O	o	O	← lost →																								
NM P7038 Yass		o	o	O		← lost →					?	O	O		?			o	O	o	O		O		R	O	o	O		O		O	← lost →					
NM P7036 Limestone Ck., Yass		O	O	o		o	R				o	o	O	o				o	O	o	L	O	O					← lost →										
NM P12596 Bowning		o	O	o		?					O	o	O	o				o	O				O				← lost →											
NM P12595 Bowning		O		o							O	o	O	o				?	O				O							← lost →								

Glabellar tuberculation — National Museum (Victoria) specimens

species: *Encrinurus mitchelli* (Foerste, 1888)

date:

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2				furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
NM P 7045 Yass		0	0	0		?				0	0		0	0				0	0 0	0	0		?		0		←		lost				←					→
NM P 7044 Yass		0	0	0		?				0	0	0		0				0	0 0	0	0		0		0			0		0		0	← lost					→
NM P 26102 Bowning		0	0	0						0	0		0					0	0 0	0	0		0		0		0	0		0	0	0		0		0		

Glabellar tuberculation — B.M.R. specimens, Canberra 1:250 000 sheet

species: *Encrinurus mitchelli* Foerste, 1888

date: 30/10/1977

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
F 24249 Peppercorn beds.		O	o		O						O	O	O							O o	O		O	←						obscured									→
F 24255 ? Yarallumla Fm.		O	R?		O						O	L?		O		O			O	O o	O		O		O			←		obscured									→
F 24256 Riverside Fm.?		O	o		O						O	o		O		O			O	O o	O		O	←						obscured									→
F 24257 cf.? City Hill Shale?		O	?		O					o	O		o			L?			O	O o	O		O	?			?	←		too strongly distorted									→
F 24263 ? Yarallumla Fm.		O			O	O					O		O			O			O	o	O		O	O	O	O		←		obscured									→
F 24267 ? same loc. – 74480027		O			O						O	?	O						O	O o	O		O	←						obscured									→
F 24275 loc. Fairbairn Gp.? 74480051		O	o		O						O		O							O o	O		O			O		O	o			O	←		?			→
F 24276 same loc.		O	O		O						O	?	O							O o	O		O		?			O	o			O	?		?		—	
F 24278 same loc.		O			O						O		O						O	O o	O		O	O				O				O	o		O		—	
F 24281 City Hill Shale, loc. 74480052		O	?		O	?					O	o	O		O	?			O	O o	O		O	←						obscure									→
F 24292 same loc.		O			O	?					O		O		O					O o	O		O	←						obscure									→
F 24296 Riverside Fm., loc. 74480057		O			O						O		O							O o	O		O	←						obscure									→
F 24297 ? same loc.		O	o		O						O		O						O	O o	O		O	←						frontal lobe lost									→
F 24298 same loc.		O			O						O		O						?	O o	O		O		O			←		obscure									→
F 24300 same loc.		O	o		O						O		O		O					O o	O		O	O	O	O		O	O	←		obscure							→
F 24304 same loc.		O			O	O					O		O						O	O o	O		O		O	O		←		obscure									→

Glabellar tuberculation — B.M.R. specimens, Canberra 1:250 000 sheet.

species: *Encrinurus mitchelli* Foerste, 1888

date: 30/10/1977

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
F 24307 same loc.		O									O			O					o	O	O		O				O	←				obscure							→
F 24308 Riverside Fm, loc. 74480062	?	O	o		O	o					O	?		O	?				o	O		?	O			o	O	←				obscure							→
F 24310 cf. Riverside Fm, loc. 74480066	← lost				O	← lost								O				← lost	o	O	O		O	o			O		O	o			O	o			O	o	
F 24311 same loc.		O			O						o	o		O	o				o	O	O		O	o	o		O		O		o		O	o	o		O		—
F 24312 same loc.		O			O	o					O	o		O	o				?	O	O		O					←				obscure							→
F 24319 ? same loc.		O	o		o						o	o		O	o				o	O	o		O	o			O		O	←		obscure							→
CPC 18033 ? same loc. ?transition to E.civica?		O	o		O	o					O	O		O	o		L		o	O	L		O				O	o	O		o	o		O	← obscure				→
F 24322 cf. same loc.		O	o		O	o					o	o		O	o				?	O	o		O		?		?		?	←		obscure							→
F 24324 same loc.		O	L?		O						o	o		O					o	O	O		O	o			O	←				obscure							→
F 24327 cf. same loc. [cf. E. civica]		O	o		O	o					O	O	R	O	o				o	O	O	R	O			o	O	←				obscure							→
77480066/34.1 cf. same loc.		O	o		O	o					o	o		O	o				o	O	O		O	o				o	o			o	o			O			
F 24328 cf. same loc. ?transition to E.civica		O	o		O						o	o		O					o	O	O		O	o	o			←				obscure							→
F 24333 Fairbairn Gp? loc. 74480072		O	o		O	o					o	o		O	o					O	O		O	←								obscure							→
F 24334 same loc.		O	o		O	?					O			O						O	O		O	←								obscure							→
F 24335 same loc.		O	?		O	o					O	o		O	o				o	O	O		O	o	o			←				obscure							→
F 24336 same loc.		O	o		O	o					O	o		O		o			o	O	O		O		o				O	?		O		?		?			

FIG.

Glabellar tuberculation — B.M.R. specimens. Canberra 1:250 000 sheet

species: Encrinurus mitchelli Foerste, 1888 date: 30/10/1977

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
F24339 cf? same loc.		O		O(f)O							O		O	O		O			(?)	O O O		O		←						lost									→
F24344 same loc.		O			O	?					O	O	O			O	?		?	O O O		O		←						obscure									→
F24349 same loc.		O	o		O		o				O	O	O			O	O		o	O O O		O			o	O	O	←		obscure									→
F24353 same loc.		O	o		O						o	o	O			O			o	O O O		O		←						obscure									→
F24354 same loc.		O			O						O	O	O		o			O	o	O O O		O		o	O				O	←		obscure							→
F24355 same loc.		O	o		O	o					O	o	O		?		L		o	O O O		O		o	O				?	?	←		obscure						→
F24357 same loc.		O	O		O	o					O	O	O						o	O O O		O		o	O	?			O	o		O	O			o	O		
F24359 same loc.		O			O	o					O	o	O		o				o	O O O		O			O				O	?			?	←		obscure			→
F24360 same loc.		O	o(f)O			o					O	o	O						o	O O O		O		←						obscure									→
F24363 same loc.		O			O			O			O		O			O			o	O O O		O		o		R			O	o			O			obscure			→
F24365 same loc.		O	o(f)O								O	o	O		o					O O O		O			O		O	←				obscure							→
F24367 same loc.		O	L		O						O	o	O					L	L	O O O		O			O			←				damaged							→
F24376 cf Riverside Fm?, loc. 74480084		O			O	o					O	o	O		o				o	O L O		O	O			O			?	O	←		obscure						→
F24377 same loc.		O			O	?					O		O		o					O O O		O		o					O			O				O			
F24382 Yarralumla Fm. loc. 74480085		O			O						O		O		o					O O O		O			O				?			?				?			
F24384 same loc.		O	L		O						O		O		o					O O O		O			O				O		?	?				?			

Glabellar tuberculation — B.M.R. specimens

species: *Encrinurus mitchelli* Foerste, 1888

date: 30/10/1977

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
F 24389 same loc.		O		O		o					O	o	O		o	R				o O O	O O	o		o					O		o		O		o		O		O	
F 24394 Yarralumla Fm. loc. 74480086		O	o	O							O	R	O						o	o O	O	O		?	o	?		←				obscure						→	
F 24396 ? Yarralumla Fm. loc. 74480087		O	o	O		o					O	?	O		?				o	o O	o	O			?	O		←				damaged						→	
F 24403 Walla Volcs. loc. 74480101		O	o	O		O					o	o	O		o				o	o o o	o	O		o	o	O		←				obscure						→	
F 24407 same loc.		O	o	O		o					o	o	O		o				o	o o o	o	O			o	O		←				obscure						→	
96. CPC 18459 same loc.		O	o	O							o	O	O						o	o o o	o	O			o	O		←				obscure						→	
F 24420 same loc.		O	R	O							o	o	O			L				o o o	o	O			o L	o	O	←				obscure						→	
F 24423 ? same loc. cf. E. civicae		O	o	o			O				o	o	o		←										damaged													→	
F 24430 ? same loc. cf. E. civicae		O	o	O							o	O	O			O			o	o o L	o	O		?	O	o	O	←				obscure						→	
F 24431 same loc.		O	R O	O							o	o	O							o L o o	o	O			o R	o	O	o	O	←				lost				→	
F 24434 same loc.		O	o	o							o	o	o						o	o o o o	o	O		o		O			O	o	o		o	o			O	o	
F 24436 same loc.		O	o	O			O				o	o	O		o	o			o	o o o	o	O		o	o			←				obscure						→	
F 24437 same loc.		O	o	O							o	o	O							o o o o	o	O		O	o	O	O	←				obscure						→	
F 24441 same loc.		O	o	O							o	o	O						O	o o o o	o	O			o	O	O	←				obscure						→	
F 24443 same loc.		O	R	O		O					o	O	O		O					o O o o	R	O		O		R		←				obscure						→	
F 24462 same loc.		O	R?	O		O					o	o	O							o o o o	R	O		o	o	o		←				obscure						→	

Glabellar tuberculation — B.M.R. specimens

species: *Encrinurus mitchelli* Foerste, 1888

date: 30/10/1977

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
F 24466 same loc.		O	o	O							O	R	O		o		R		o	o O	? O	O		←						lost									→	
F 24472 ? same loc.		O	o	o		o					o	o	o		?				?	o O	L O	O			?			←				obscure						→	
F 24474 same loc.		o	o	o		o	L				o	o	O			o			o o ??	o o L	o	O			o	o	o	←				obscure						→	
F 24475 same loc.		O	R	O							o	o	O							o o	R o	O			o		o		O		L		O		obscure				→	
F 24476 same loc.		o	o	o							o	o	O			o	L			o o	o o	O			o	R	O	o	O		o	o	O	o		O		o	→
F 24477 same loc.		o	o	o							o	L	O							o o	o o	O		o	o		o	o	O		?	←		lost				→	
F 24481 same loc.		o	o	o							o	o	o						o	o o	o	o		o	o		o	←				obscure						→	
F 24484 ? same loc.		o	o	o		o				o	O	L	O		o	o			o	o o	o L O	O		o	o	L		o	o	←				obscure				→	
F 24487 same loc.		O	o	o							o	o	O							o	O	O		o	o	o	o		O		o	o	←		obscure				→	
F 24488 same loc.		O	o	o		o					o	o	o		o				o	o o	o	O		o		o	?	←				obscure						→	
F 24493 same loc.		o	o	o		?					o		o			R			o	o	O	O		o	o	o		o	o		?	←		obscure				→	
F 24497 same loc.		o	o	o							o	o	O						o (+R)	o L o	O			o	o	o	o	o	o	o		?	←		lost			→	
F 24500 same loc.		o	o	o		o					o	o	O		o	o			o	o o	o O	O		?	o		?		o	←				lost				→	
F 24504 same loc.		o	o	o							o	R	o						o	o L	o O	O		o		o			o	o			o	o		obscure		→	
F 24521 same loc.		o	o	o							o	o	o						o	o o	o O	O			o	o	o	o	o		o	←		obscure				→	
F 24526 ? same loc.		o	o	o		o					o	o	O		o	L			o	o L	o O	O			o	o	L	←				obscure						→	

Glabellar tuberculation — B.M.R. specimens

species: *Encrinurus mitchelli* Foerste, 1888

date: 30/10/77

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
F 24529 same loc.		O	o	O							O	O	O							O O	O O	O			O L O R	O		O	O		O	?		?		?			
F 24530 same loc.		O	o	O							O	O	O							O O	O	O			R	O	O	←				obscure						→		
F 24535 same loc.		O	o	O			O				O L	O	O		O	O			O	O O	O O	O			?	?	?	?	←			obscure						→		
F 24540 same loc.		O	o	O							O	O	O							O O	R O	O			R O	R? O	O	O	O	?		O		O		O			
F 24542 same loc.		O	o	O							O	O	O			O				O O	O O	O			O	R O	O	O	O	←			obscure						→	
F 24564 cf. Yarralumla Fm. loc. 74480123		O		O			O			O	O		O			O			O O R	O	O				L				O			?	?			?			
F 24566 same loc.		O		O							O		O		?				O O	O	O			O					O		?	←				obscure		→		
F 24569 cf. same loc.		O	o	O		O				O	O	?	O			O			O	O O	O	?	O						←				obscure					→		
F 24570 same loc.		O	o	O							O		O							O	O		O		R?	O			←				lost					→		
F 24571 same loc.		O		O							O		O			O			O	O	O	O	O		?		O		←				obscure					→		
F 24573 same loc.		O		O		O					O		O		O	L				O O	O	O			O				←				obscure					→		
F 24575 cf. same loc.		O	R	O							O		O			O			O	O	O	R?	O						←				obscure					→		
F 24576 same loc.		O	o	O							O		O		O				O	O O	O	O	O	O	O				←				lost					→		
F 24578 cf.? Yarralumla Fm., loc 74480143		O		O						O	O		O		?				?	O	O			O	L	O			O	?		O	←				lost	→		
F 24579 same loc.		O		O		O					O		O		O				O	O	O	R	O			O			?	←				obscure					→		
F 24582 cf.? Yarralumla Fm., loc 74480146		O	o	O		O					O		O						O	O	O					O			O		O	O	←				obscure	→		

Glabellar tuberculation — B.M.R. specimens

species: *Enerinurus mitchelli* Foerste 1888

date: 30/10/1977

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
F24583 [cf] Camp Hill Sst., loc. 74480156		O		O							O	L	O		O				?	O	O			O				O	O	O	O		O	O			O	O		
F24586 [cf?] Yarralumla Fm?, loc. 74480161	?	O	o	O		O				O	O		O		O		O		O	O		O		←						lost									→
F24597 [?] Yarralumla Fm., loc. 74480171		O		O		o				O	O		O		o				o	O	?	O		←						obscure									→
F24598 same loc.		O		O							O		O		o				o	O	O	O			O				O	o		o	O				O			
F24601 Camp Hill Sst., loc. 74480174		O		O		o					O	o	O		o				o	O	O	O		←						obscure									→
F24605 same loc.		O	o	O		o				o	O	o	O			o			o	O	O	O		←						obscure									→
F24608 same loc.		O	?	O							O	o	O		o				o	O	O	O		←								lost							→
F24617 Walker Volcs., loc. 74480177		O	o	O							O		O		?				o	O	O	O		←								lost							→
FIG. CPC 18587 same loc.		O	o	O		o					O	o	O							O	O	O		←						obscure									→
F24627 same loc.		O	R?	O							O	o	O							O	O	O				O			O	?			O	o			O			
F24634 same loc. juvenile?		O		O		O					O	o	O						?	O	O	O		?		?			O	o			O		R		O			
F24636 same loc.		O	?	O							o	o	O			o			o	O	o	O		o		O	L	o	O	o		o	O				O			
F24643 same loc.		O	o	O		?					O	o	O		?					O	O	O		o		O	R		O	o			O		o		O			
F24645 same loc.		O	o	O						R	R		O			L	L		o	O	o	O		O		O		←				obscure							→
F24648 same loc.		o	o	O							o	o	O		o				O	O	O	O			o	o		o	O	o		←			obscure				→
F24660 same loc.		O	L	O						R L	O		O			L			O R O R		O	O		o		O			O		?		O	?			O		

Glabellar tuberculation — B.M.R. specimens

species: *Encrinurus mitchelli* Foerste 1888 date: 30/10/1977

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
F24671 [?] same loc.		O	O	O							O	O	O							O O O	O O	O		O	O	O	O	O	O		O		O				O O		O
F24672 same loc.		O	O	O		O					O	O	O							O O	O	O			O	O	O	obscure											
F24685 Camp Hill Sst.?, loc. 74480234		O		O							O	O	O		O				?	O O	R O	O		O		O		O	O		O	O	O			?		?
F24699 Walker Volcs, loc. 74480285		O	O	O		O					O	O	O		O				O	O O	O	O		O	O	O	O	?	O		O	O		?		?		O
F24703 same loc.		O	O	O		O					O	O	O		O				O	O O	O	O				O			?			O				O		O
F24704 same loc.		O	O	O		?					O	O	O			O	O			O O	O			obscure														
F24708 [cf.] same loc.		O	O	O		O					O	O	O						O	O O	O	O	O		?	O	O	O	O		O	?		obscure					
F24710 same loc.		O	O	O		O	O				O	O	O		O	O	L		O	O R	O O	O			?	O		obscure											
F24713 [?] same loc.		O	O	O		O					O	O	O		O	O			?	O O	O O	O		?	O		O		O		O		O	O		O	O		O
F24714 same loc.		O	O	O		?					?	O	O		?	?			O	O O	O O	O			O			O	O		?	?	O	?			O		
F24718 same loc.		O	O	O		O					O	O	O			O			?	O O	O O	O		obscure															
F24719 same loc.		O	O	O							O	O	O							O O	O O	O			O	O			O		O		O	O		O			
F24723 same loc.		O	O	O		O					O	R	O		O				O	O RR	O R	O		?	O			obscure											
F24726 same loc.		O	O	O							O	O	O			O			O	O O	O O	O		?		O			O		?		O				O		O
F24728 same loc.		O	O	O		?					O	O	O		O			O	O	O O	O			?	?	O			?	?	?		?	obscure					

Glabellar tuberculation

species: **Encrinurus rothwellae**

date:

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
AMF 25356 Bowning	damaged																																						
AMF 36004 type Bowning	damaged																																						
AMF 36006 Bowning	damaged																															lost							

Glabella tuberculation

species: *Encrinurus etheridgei*

date: 4/11/1975

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1.	0	1
AMF 4504 A Yarralumla		O		O		O				O	O		O			O				O	O	O			L O	O			O	O			O	O			O		O
4504 B TYPE Yarralumla		O		O		O					O	R	O		?					O	O	O		?	?			←				damaged						O	→
BMR specimens —																																							
F 24269 [cf.] loc. 74480045		O		O							O		O							O		O		O				←				damaged							→
F 24272 [?] loc. 74480048		O		O		O				O	O		O		O					O	O	O		O	O			←				damaged							→

Glabellar tuberculation

species: *Encrinurus civicae*

date:

	Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
		0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
FIG.	SUP 929 A Mumbil Fm?, Orange	o	O	o	O			o				O	O	O		o	O			o	O O O	O L	O		o	O	O	O	←				obscure							→
	F24408 [?] loc. 74480101		O	o	O		o					O	O	O		o	O			o	O O O	O L O L	O	O			O	O	←	obscure			←	lost						→
	CPC 18466		O	o	O		O	o			o	O	O	O		o	O			o	O O O	O o	O		o	o				O		O		O		O		O		
	CPC 18467		O	o	O		?					O O O	O o	O		o	O	R		o	O O O	O L L	O			O	O		←				obscure							→
	CPC 18470		O	L	O			o				O	O	O		o	O			o R	O O	O	O			O	O		o	O	o	O	o	O	o	O	O R		SEE NOTE BELOW	
FIG.	CPC 18471		O	?	O		O				o	O	o	O			O			o	O O O	O				O	O		←				irregular							→
	CPC 18472	o	O	o	O			o			o	O	O O	O						o	O O O	O			o	o	O	R	o	O	o	O	o	O	o	O		O		
	CPC 18474	o	O	o	O		o		o		o	O	O	O			o			o	O O O	O R	O			o	O	R	←	obscure			←	lost						→
FIG.	CPC 18481		O	o	O		O					O	O	O		o		O		o	O O	O	O		o	O	L		o	O	o	O O	o	O O L		O		O		
	F24448 [?]	←			lost					→	←	damaged	?	?	?	O	o	L	L	o	O O	O	O			o	o	o	O	O	o		O	o		O		R		
	CPC 18485		O	o	O		O					O	O	O		o				o	R O O	O			o	O	O		←				irregular							→
	CPC 18486	o	O	o	O			o			o	O	o L O				o			o	O O O	O			o	O	O	O	??		??		?	?		?		?		O
	CPC 18489		O	o	O			o				O	o	O			?			←					→					←	lost									→
FIG.	CPC 18490		O	o	O		O	R			o	O	o	O		O	O			o	O R O	O L?	O		o	o	o		O		O	o	O		irregular				O	
FIG.	CPC 18491	o	O	o	O		o				o	O	o	O		O		o		o	O O O	L L L	O			o	O	o	O	O			←	irregular						→
	CPC 18496		O	o	O		o					O	O	O		?				o	O O	O	O		?	?		?	?	?		?	←	damaged						→

CPC 18470: tuberculation on frontal lobe has appearance of concentric circles.

Glabellar tuberculation

species: *Encrinurus civicae* date:

	Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
		0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
	CPC 18497 loc. 74480101		O	O	O		O					O	O	O		O	O				O	O L O	O O	O	O	O	O			O		O	O	?	O	O	O		O		?
	CPC 18499		O	O	O		O					O	O R	O		O	L				O	O O	O O	O		O	O		O	O	O	O	irregular							O
FIG.	CPC 18508	O	O	O	O		O				O	O	O	O		L R L R L R				O O O O O O	O	O	O	O		O	O	O	irregular										
	CPC 18510	O	O	O	O			O				O	O	O		O	O			O	O	O L	O	O	O O	O			lost											
	CPC 18514		O	O	O		O					O	O	O			O	O		O	O	O	O	O	O	O	O	O	obscure											
	CPC 18515		O	O	O		O					O	O	O		O		O	O	O	O L O	O	O	O		O	O			O		O		O	irregular					
	CPC 18516		O	O	O							O	O	O		O	O	R		O	O	O	O L O	O	O	O	O			irregular										
	CPC 18519		O	O	O		O					O	O	O		O				O	O	O	O	O		O	O			obscure										
	CPC 18599 loc. 74480285		O	O	O		O	O				O	O	O		O				O	O	O O L	O	O		?		O	?	?		?	lost							
	CPC 18600		O	O	O							O	O	O		O	L			O	O	O L O	O		O	O			obscure				lost							
FIG.	CPC 18604 HOLOTYPE	O	O	O	O		O	O			O	O	O	O		O	O	R		O	O O O	O O	O O	O	?	?	O	O		irregular										O
	CPC 18605	lost									damaged						O	O		O	O	O	O R	O	O		O		O	O	irregular									O
FIG.	CPC 18606		O	O	O		O		L		O	O	O			?	R			O	O	O	O O (S)		O	O	O		O	O	O	O		O		O	O	O		O

Glabellar tuberculation

species: *Encrinurus robustus*

date: 3/11/1975

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
AMF 28117 steinkern	o	O	o	O		O				O	O	O O	O			O	O	O	O	O O	O	O O	O	←						obscure									→
AMF 28121 cast	o	O	o	O		O		L		O	O	O O	O		O fint	O	O	O	O	O O	O	O O	O	←						obscure									→
AMF 28119		O	O	O		O					O	O	O		O	O	O		O O	O O	O	O O	O	L? R?	L?	?	?		O	O	o	o	O	o			O	?	

Glabellar tuberculation

species: *Encrinurus silverdalensis* date: 5/11/75

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
AMF 27439 B		0		0		?					0		0		0				0	0	0 0	0		0	0	0	0		0		0	←			lost				→
AMF 35999 6 B TYPE		0		0		0					0		0		0				0	0	0 0	0		?	?			←							lost				→
SU P — (Jakins Coll.)		0		0		0					0		0		0				0	0 0		0		0		0		0	0	←					obscure				→

Glabellar tuberculation

species: *Encrinurus borenorensis* : type series

date: 24/8/77

Specimen Nr. etc	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
AM F42694 holotype		O		O						O	O	O	O			O				O	O O O	O			O	L	O		distant O	O	O	O	O		O		O		?
42697		O		O							O	R	O						O	O O O	O	O				R	O		?	?			?	?			?		?
42896		O		O							O	R	O			O			O	O O O	O	O			O	O	O	←					obscure						→
42690		O		O							O	L	O		O				O	O O A O	O	O		O		O	O		O	O			?		?	←	obscure		→

Glabellar tuberculation

species: *Batocara bowningi*

date: 5/11/1975

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
In 27609 (BM) TYPE		O	O								O	O								O	O								O			O	O		O	O		O	
AM F 25370		O	O								O	O								O	O								O			O	O		O	O		O	
25333		O	O								O	O								O	O								O			O	O		O	O		O	
25338		O	O								O	O								O	O								O			O	O		O	O		O	
25340		O	O								O	O								O	O								O			O	O		O	O		O	
25341		O	O								O	O								O	O								O			O	O		O	O		O	
25345		O	O								O	O								O	O								O			O	O		O	O		O	
25347		O	O								O	O								O	O								O			O	O	O	O	O		O	
26203 A		O	O								O	O								O	O								O			O	O	← lost →					
26203 B		O	O								O	O								O	O								O			O	O		O	O		O	
27760	← lost →										O	O								O	O								O			O	O		O	O		O	
27500		O	O								O	O								O	O								O			O	O			O		O	
28140 A		O	O								O	O								O	O								O			O	O			O		O	
28147		O	O								O	O								asymmetric								←				lost						→	
28150		O	O								O	O								O	O									O		O	O			O	O	O	
28152		O	O								O	O								O	O								O			O	O	← lost →					

Glabellar tuberculation

species: *Batocara bowningi*

date: 5/11/75

Specimen Nr. etc.	lobe L1					furrow S1				lobe L2					furrow S2				lobe L3					furrow S3				F4		4/5		F5		5/6		F6		Fa	
	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	2	3	4	0	1	2	3	0	1	0	1	0	1	0	1	0	1	0	1
AMF 28162		O	O								O	O								O	O								O				O	O			?	O		O
28163		O	O								O	O								O	O								O				O	O			?	O		O
28164		O	O								O	O								O	O								O				O	O				O		O
29143		O	O								O	O								O	O									O			O	O			O	O		O
29144		O	O								O	O								O	O								O				O	O				O		O
29146		O	O								O	O								O	O								O				O	O			O	O		O
29149		O	O								O	O								O	O								O				O	O				O		O
29152		O	O								O	O								O	O									O			O	O			O	O		O
29155		O	O								O	O								O	O								O				O	O			O	O		O
29162		O	O								O	O								O	O								O				O	O				O		O
29163		O	O								O	O								O	O									O			O	O			O	O		lost
35860		O	O								O	O								O	O								O					O				O		O
35974		O	O								O	O								O	O									O			O	O			O	O		O
36100		O	O								O	O								O	O									O			O	O			O	O		O
51784		O	O								O	O								O	O								O				O	O			O	O		O

Symbols used in all graphs —

Coronocephalus urbis ▽

Encrinurus mitchelli — Yass syncline — •

— Canberra — ○

Encrinurus rothwellae ×

Encrinurus etheridgei △

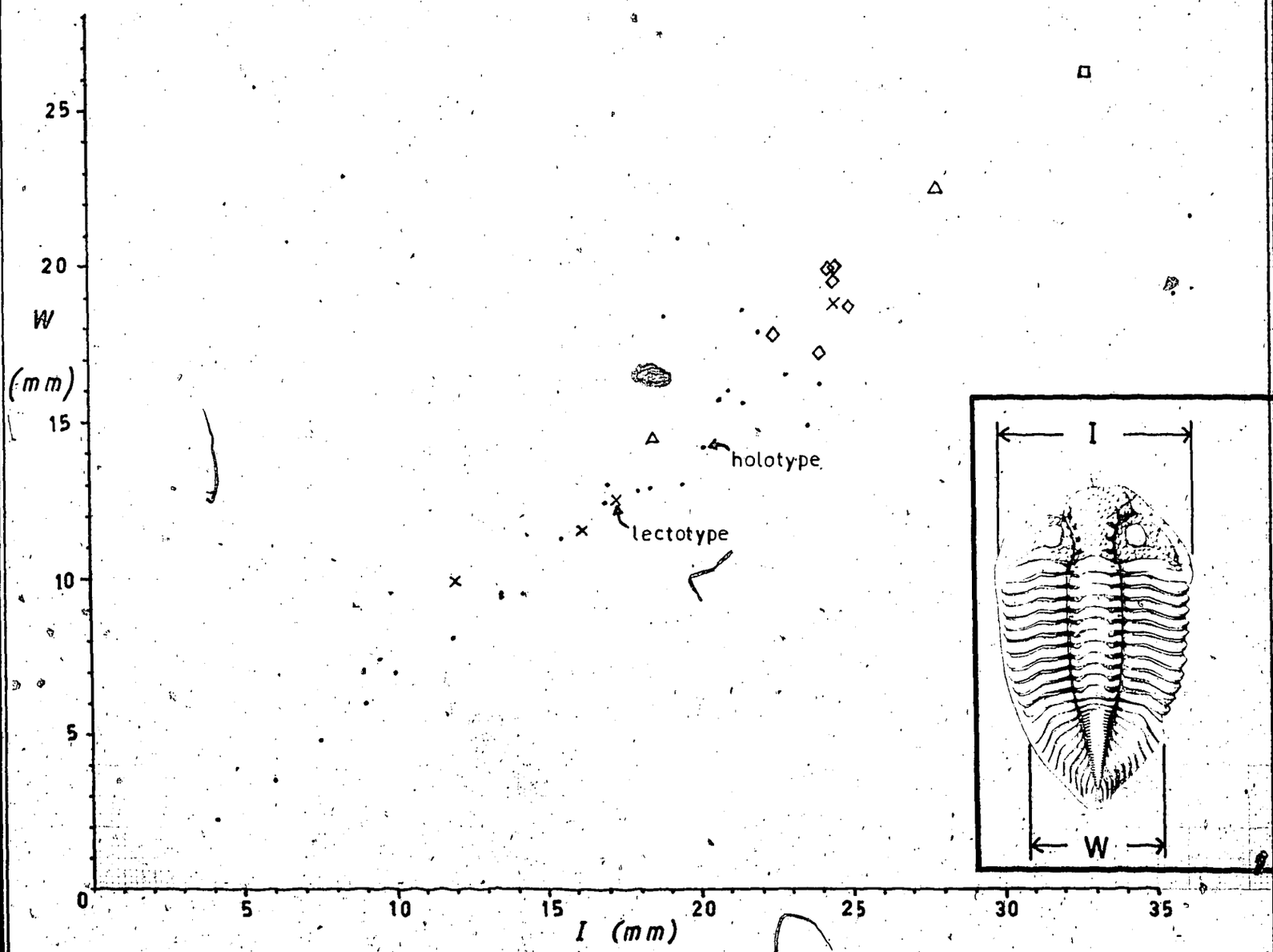
Encrinurus civicae +

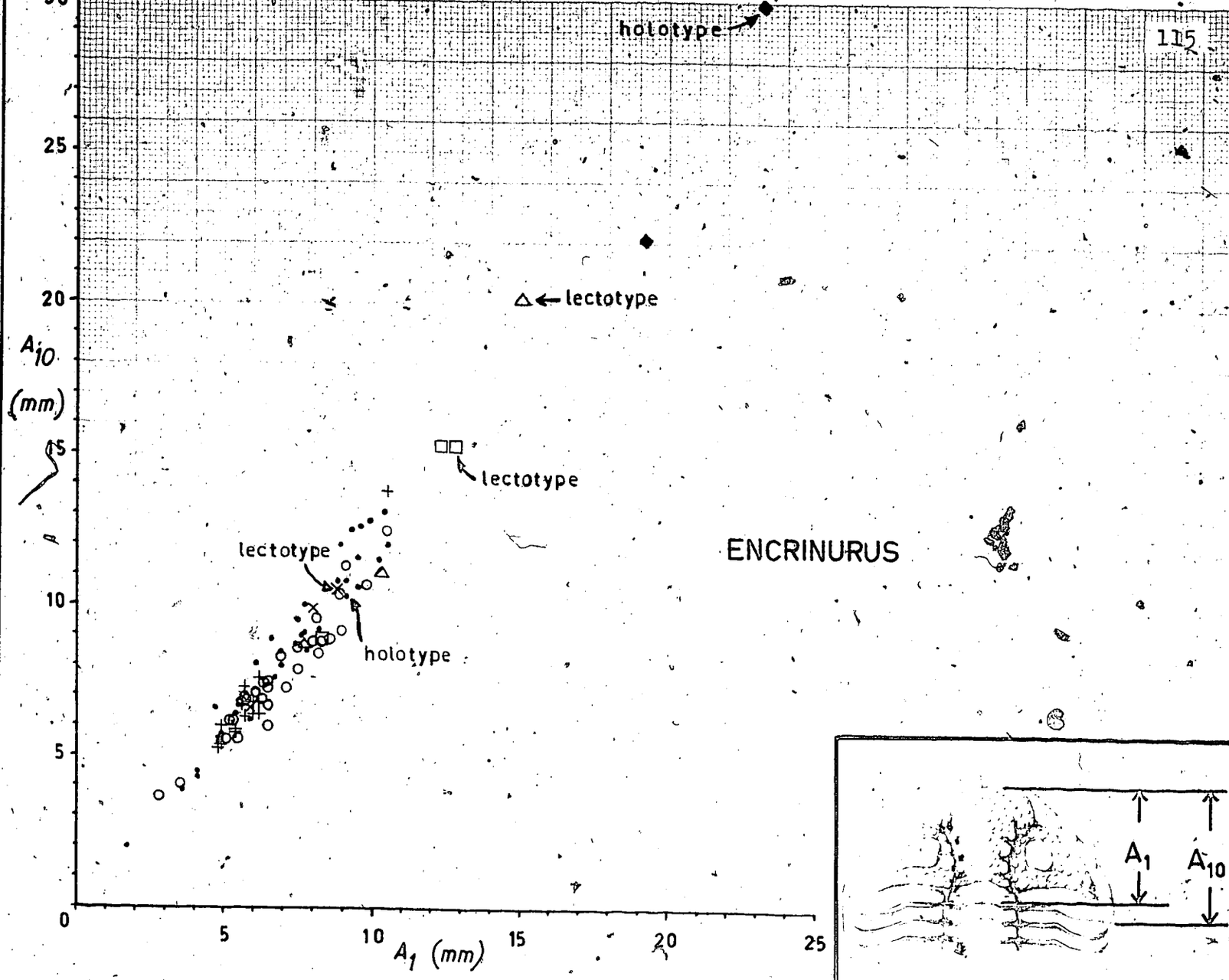
Encrinurus robustus □

Encrinurus silverdalensis ▢

Encrinurus borenorensis ◇

Batocara bowningi ◇

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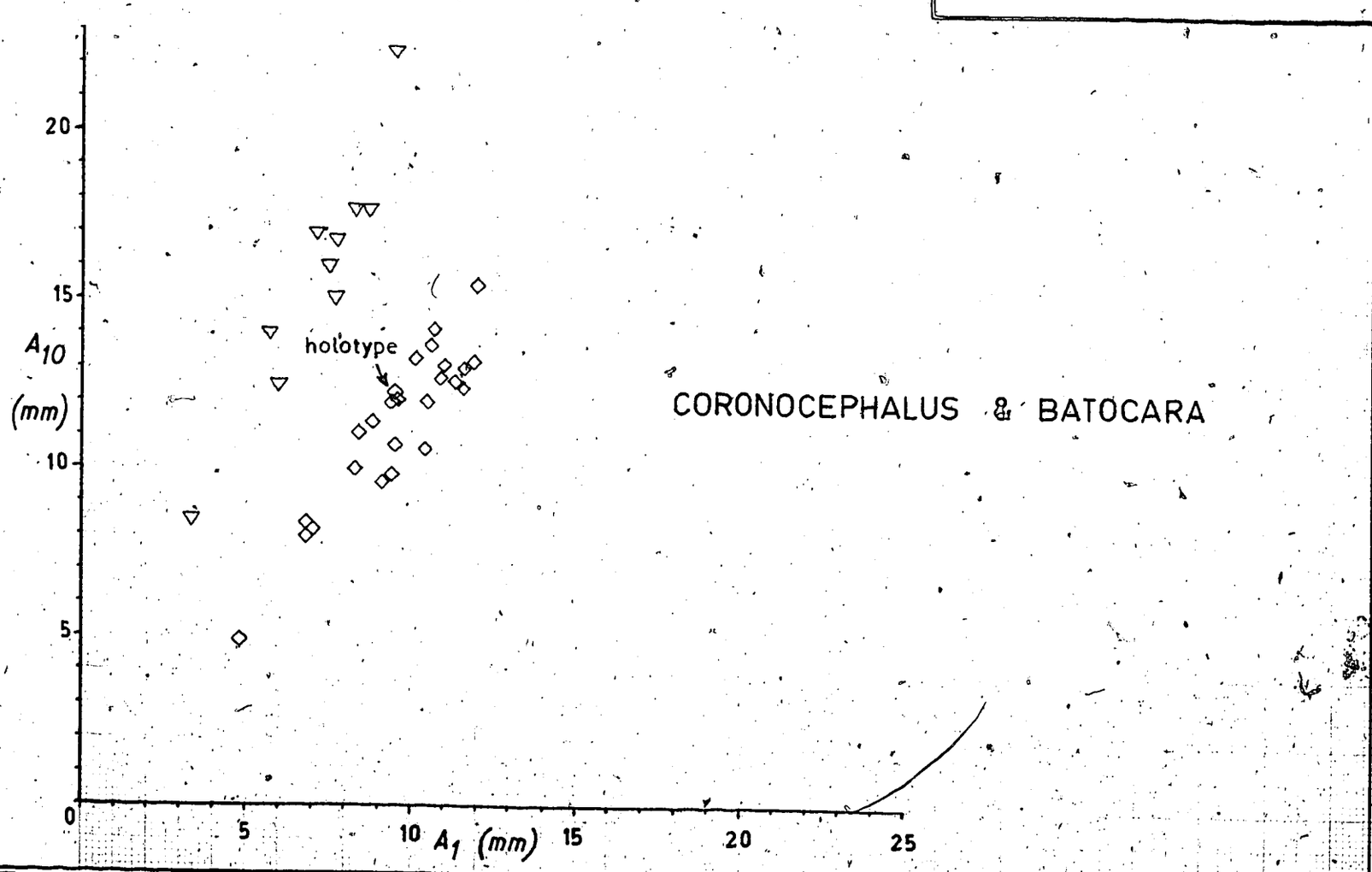
lectotype
lectotype
holotype
ENCRINURUS
A_{10} (mm)
A_1 (mm)
0
5
10
15
20
25
A_1
A_{10}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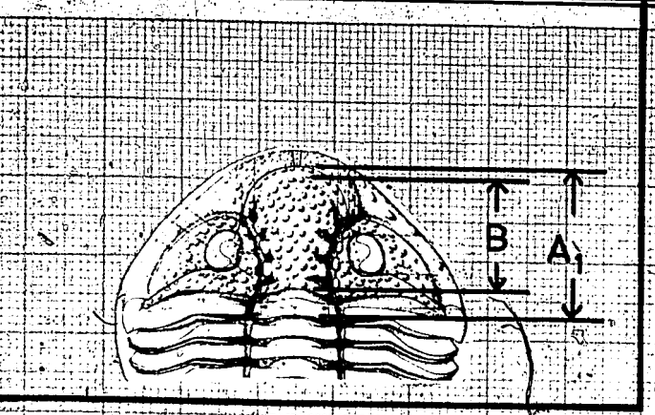
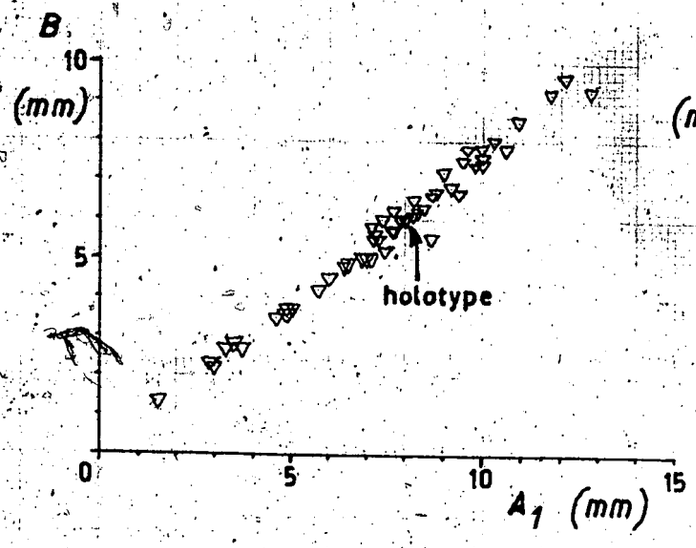
CORONOCEPHALUS & BATOCARA
A_{10} (mm)
A_1 (mm)
0
5
10
15
20
25





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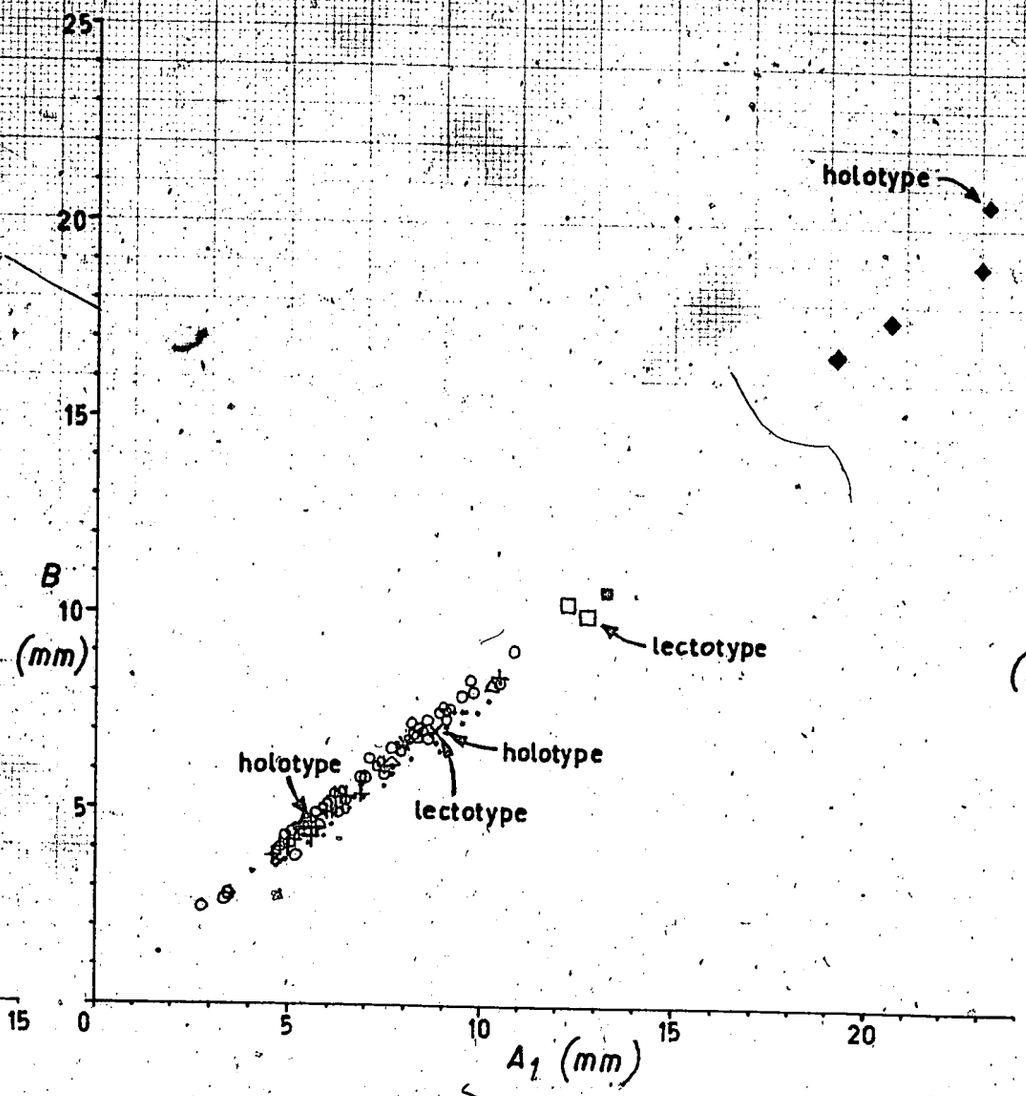

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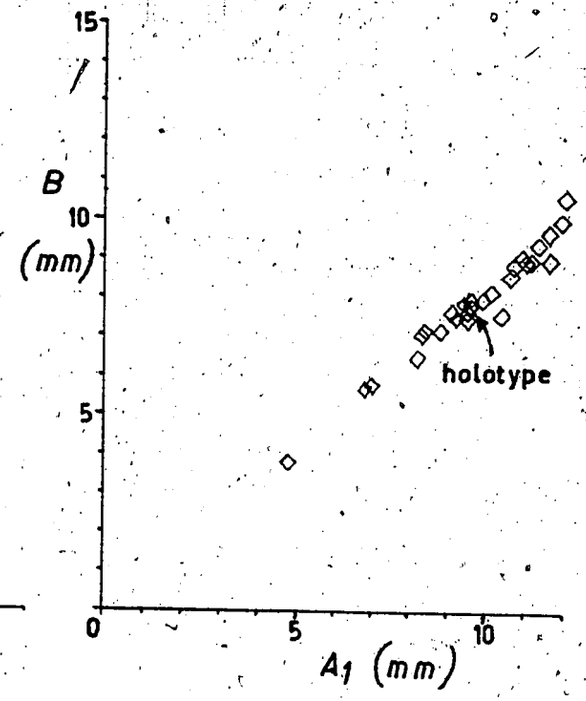
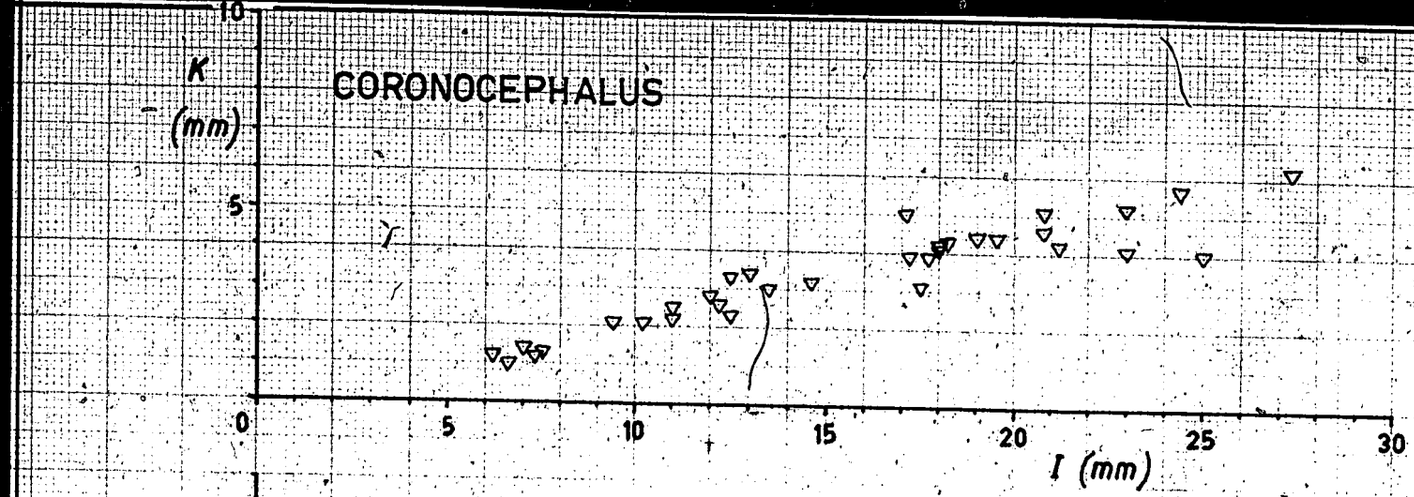


BATOCARA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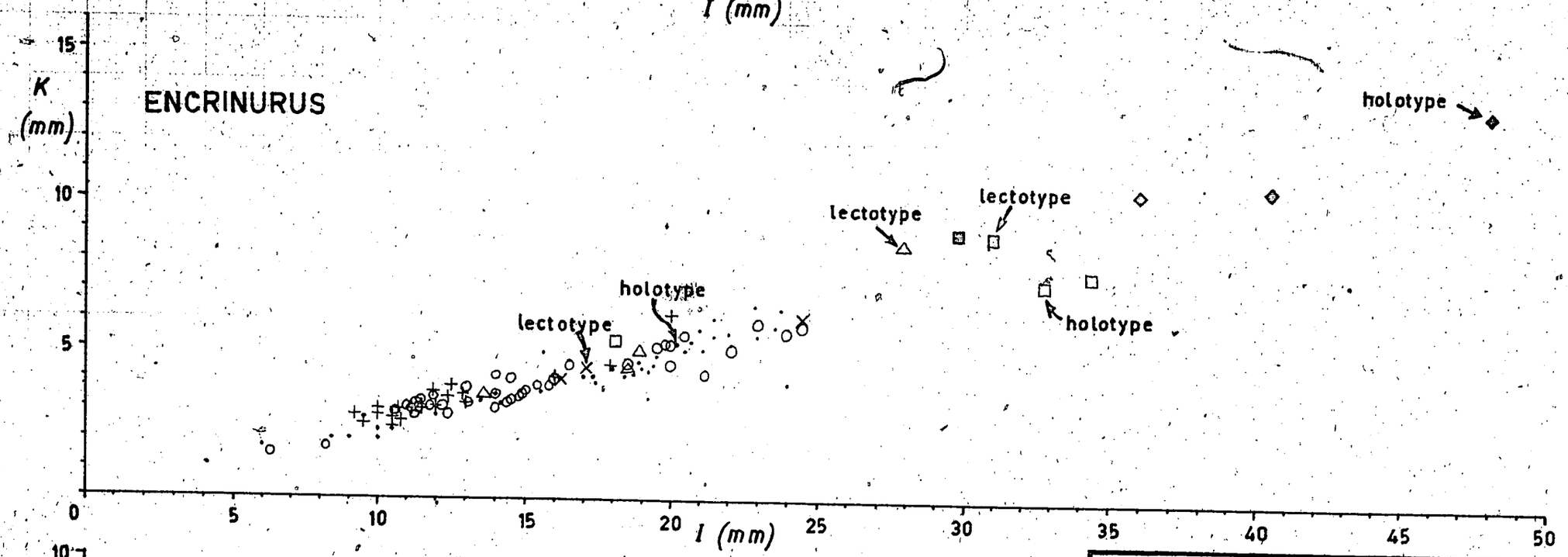
K (mm)
I (mm)
0
5
10
15
20
25
30


ENCRINURUS
K (mm)
I (mm)
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lectotype
holotype
lectotype
holotype
0
5
10
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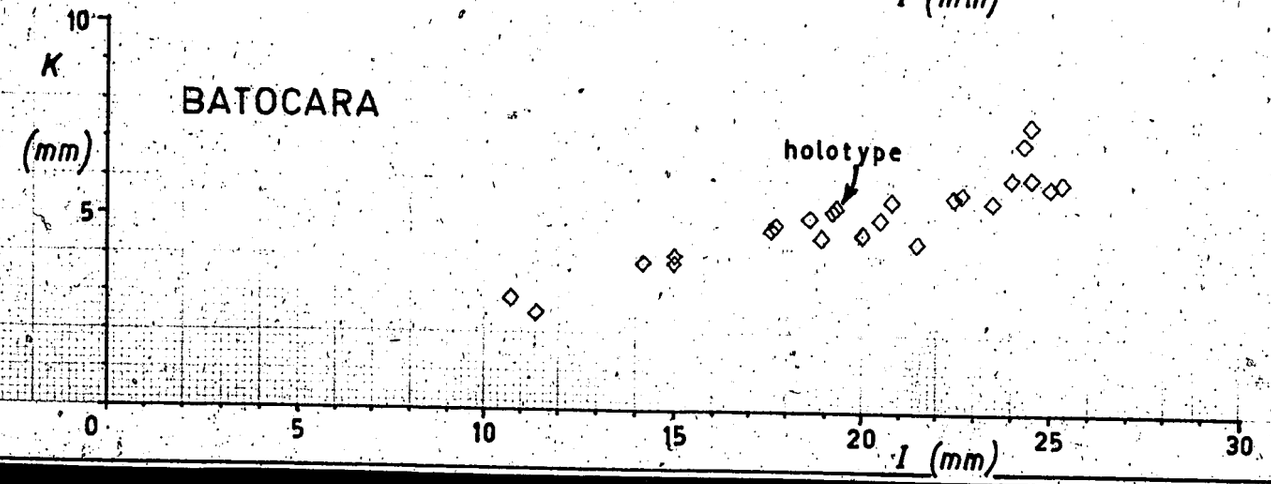
35
40
45
50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K (mm)
I (mm)
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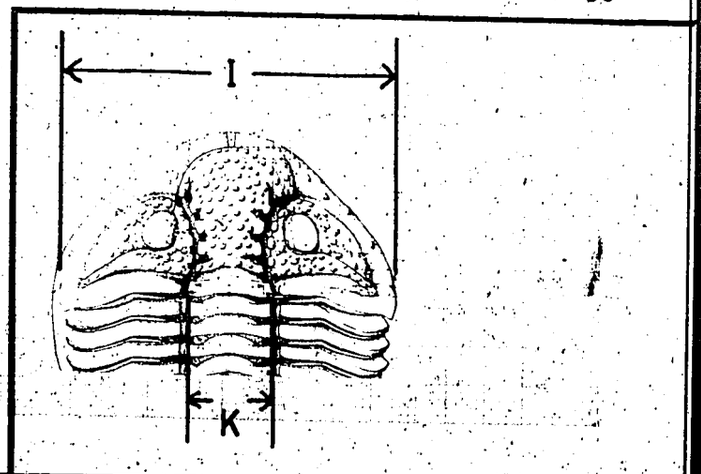
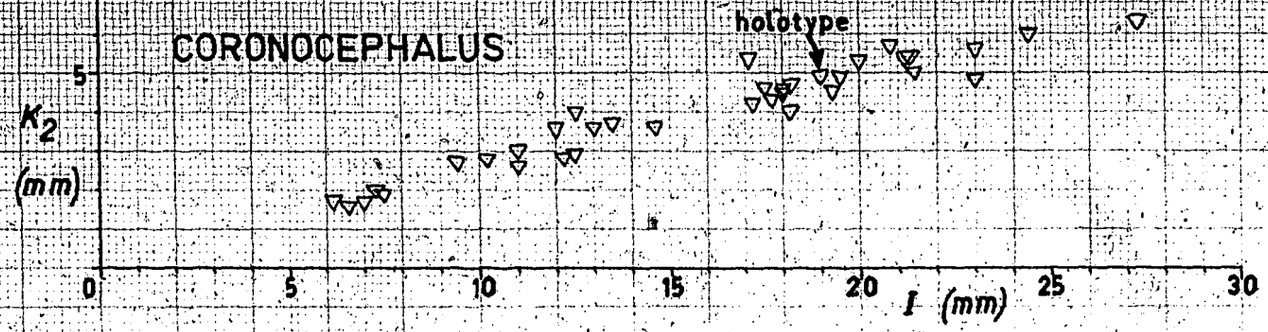
0
5
10
15
20
25
30


I
K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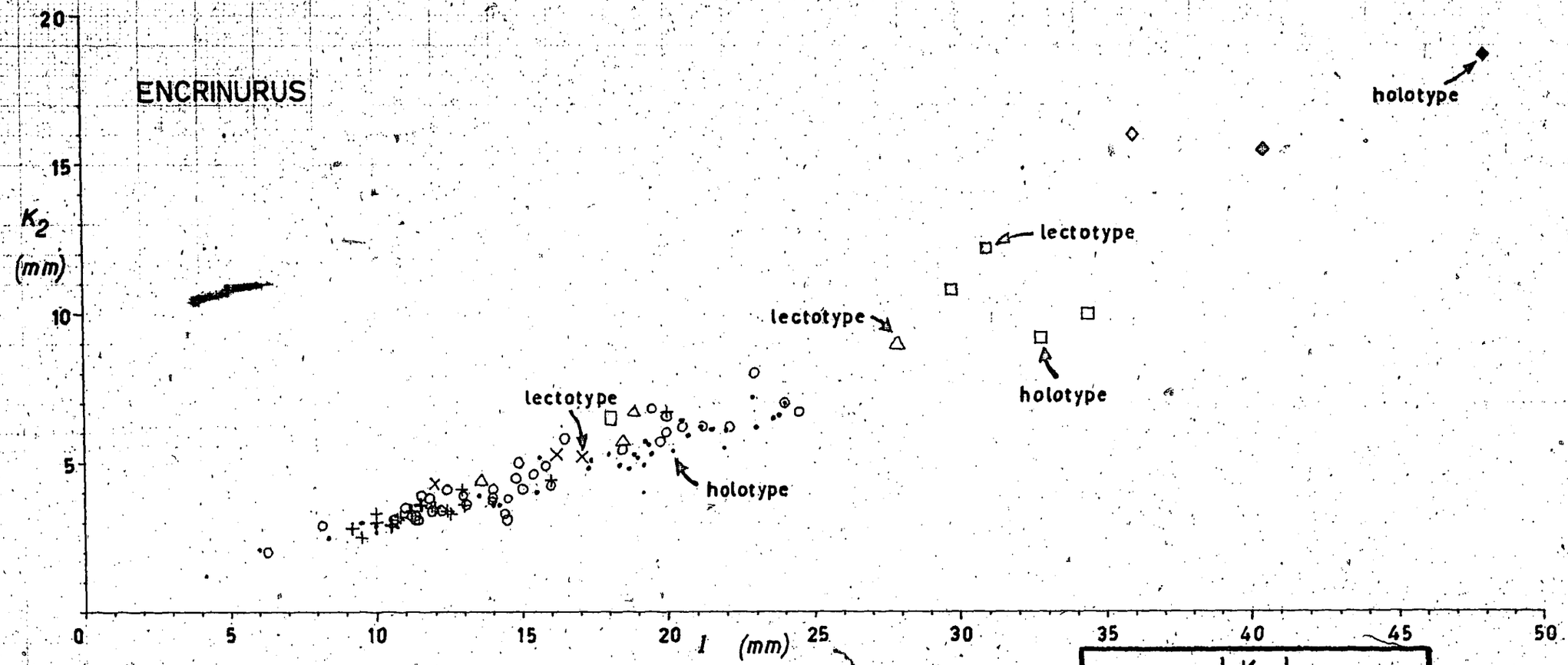
K_2 (mm)
5
0
5
10
15
20
25
30
I (mm)


ENCRINURUS
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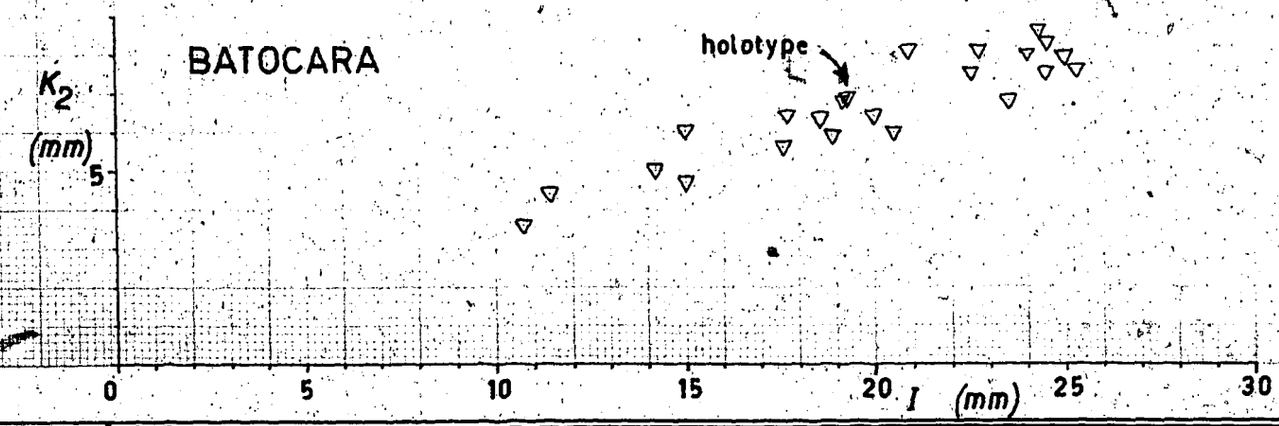
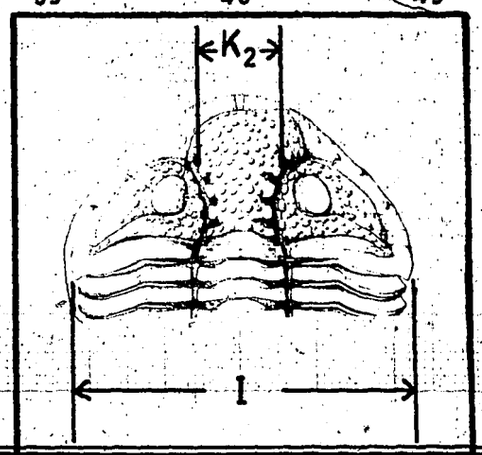
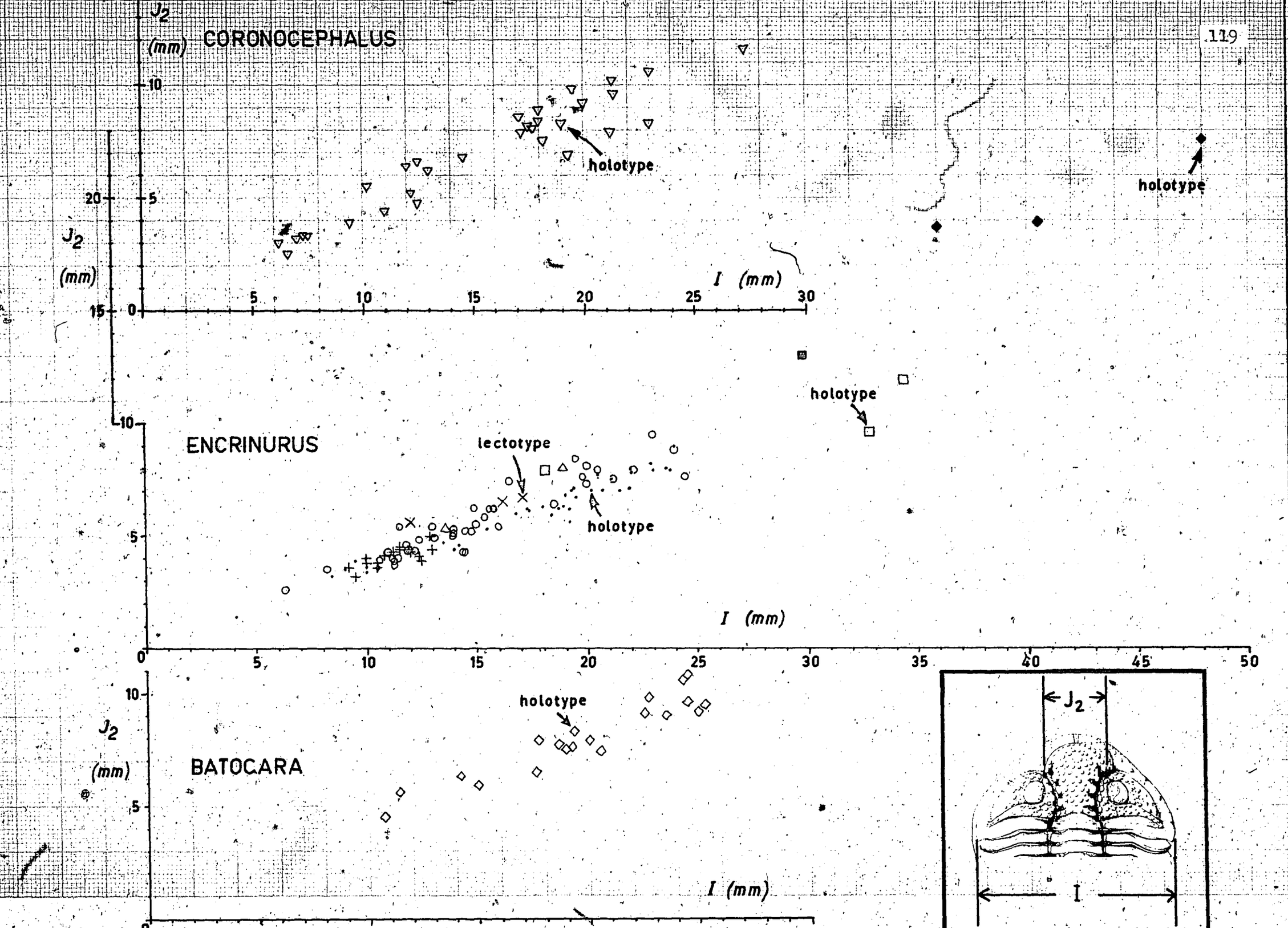
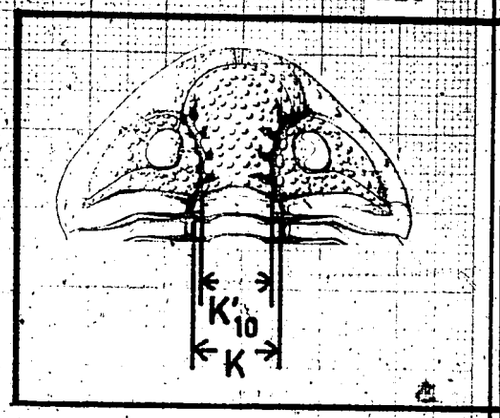
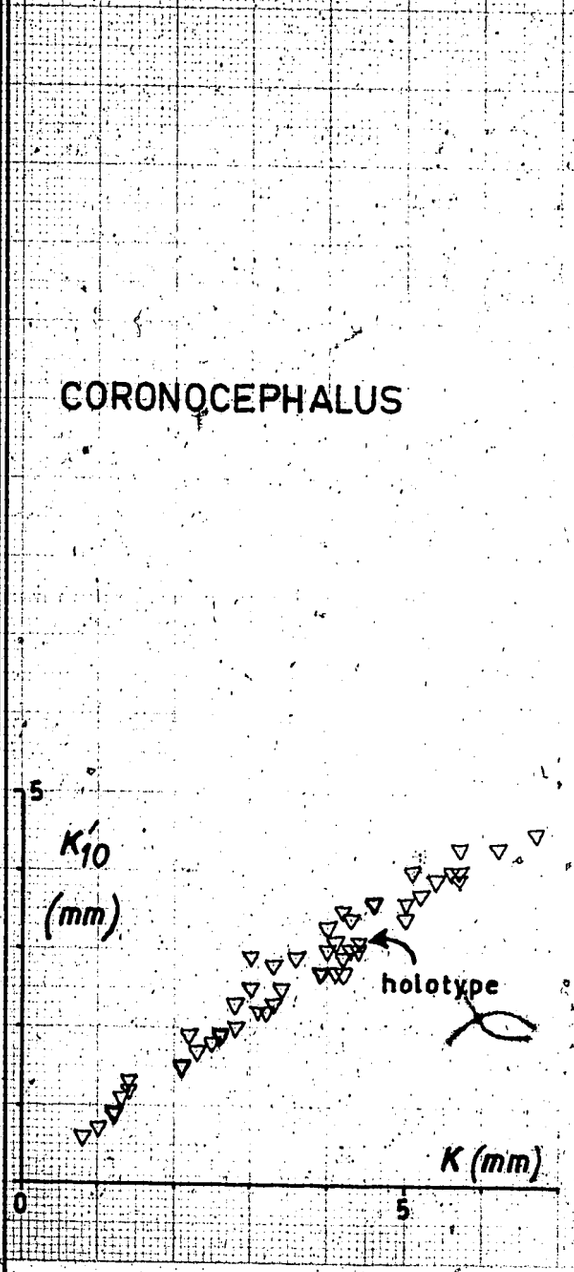
lectotype
holotype
lectotype
holotype
K_2 (mm)
20
15
10
5
0
5
10
15
20
25
30
35
40
45
50
I (mm)


BATOCARA
holotype
K_2 (mm)
5
0
5
10
15
20
25
30
I (mm)


K_2
I


CORONOCEPHALUS
J2 (mm)
I (mm)
holotype
holotype
ENCRINURUS
lectotype
holotype
holotype
BATOCARA
holotype
J2
I


K'10
K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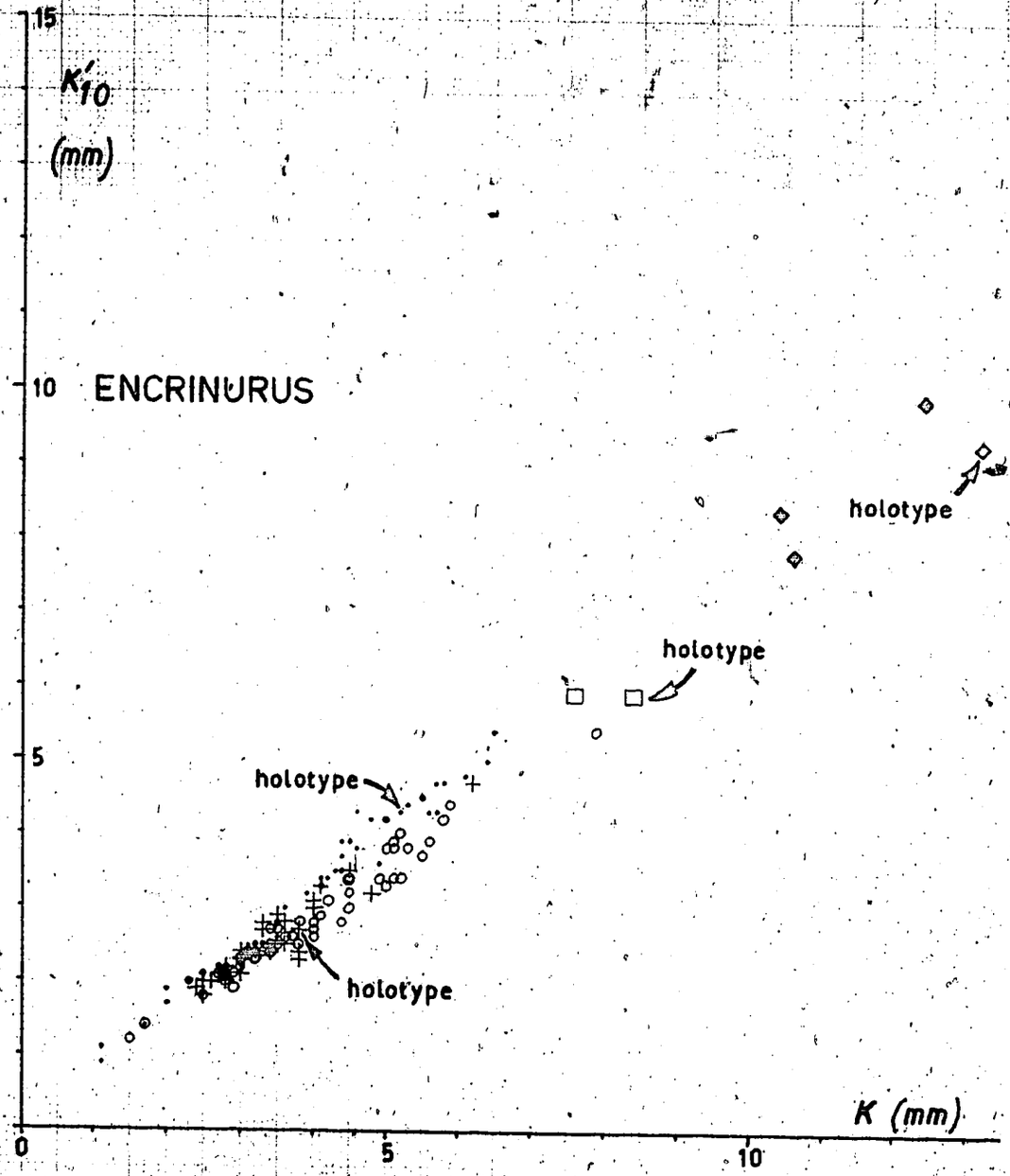
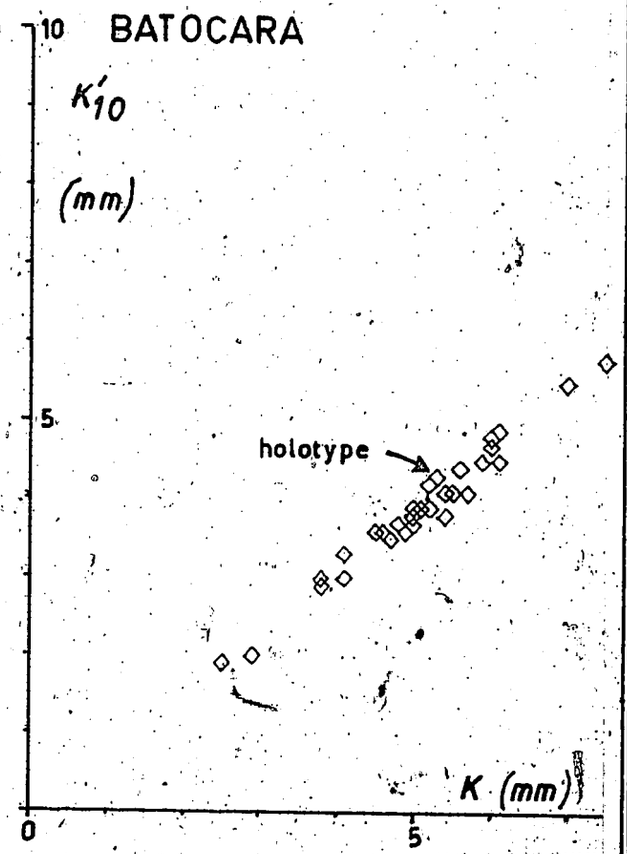
K'10
(mm)
holotype
K (mm)
0
5
5


ENCRINURUS
K'10
(mm)
15
10
5
holotype
holotype
holotype
holotype
K (mm)
0
5
10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K'10
(mm)
10
5
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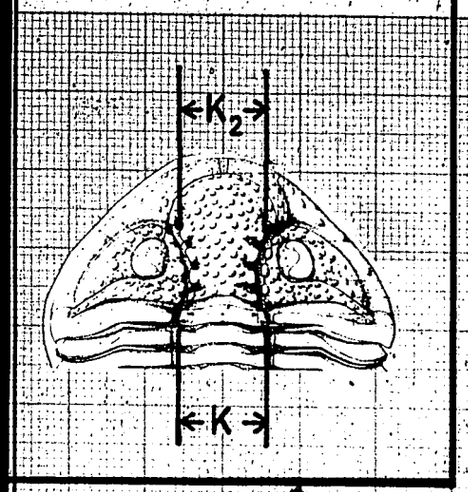
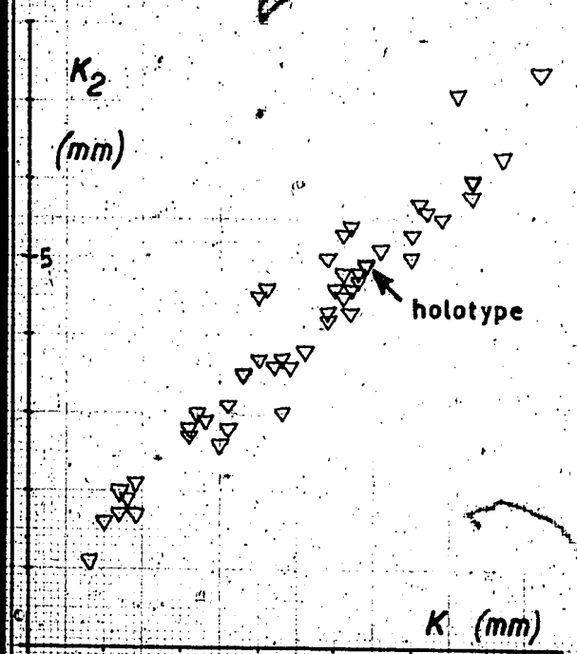
K (mm)
0
5


K2
K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K2
(mm)
5
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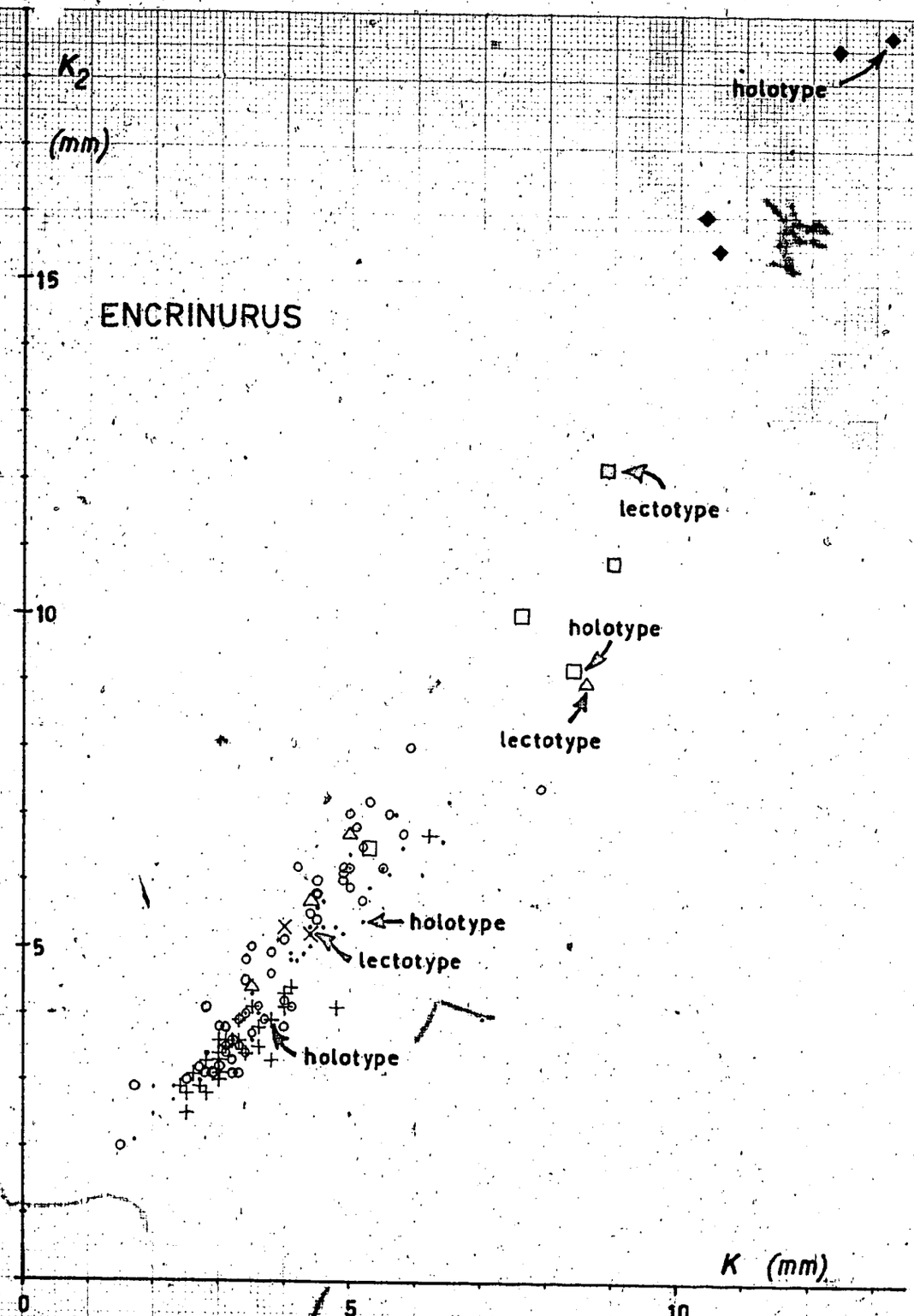
K (mm)
0
5


K2
(mm)
15
ENCRINURUS
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10
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5
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lectotype
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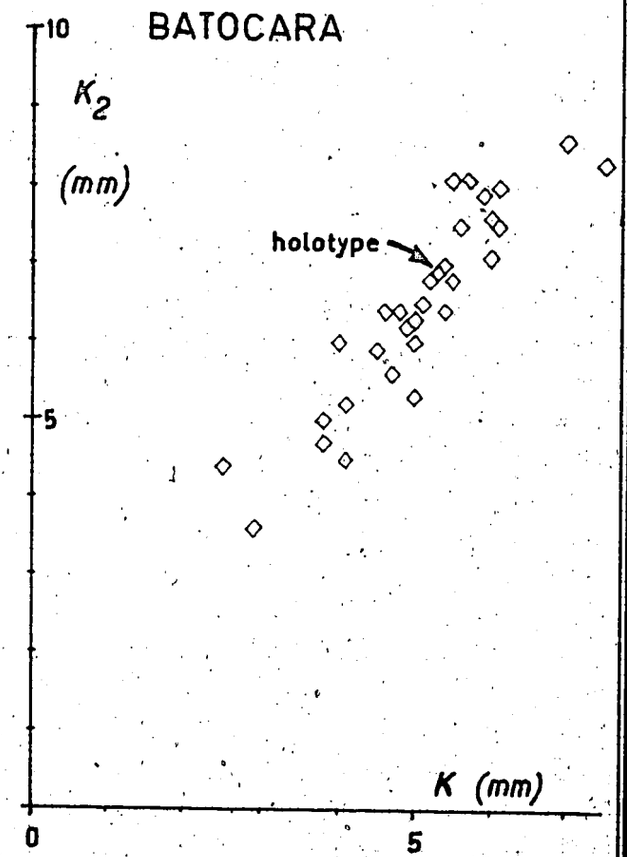
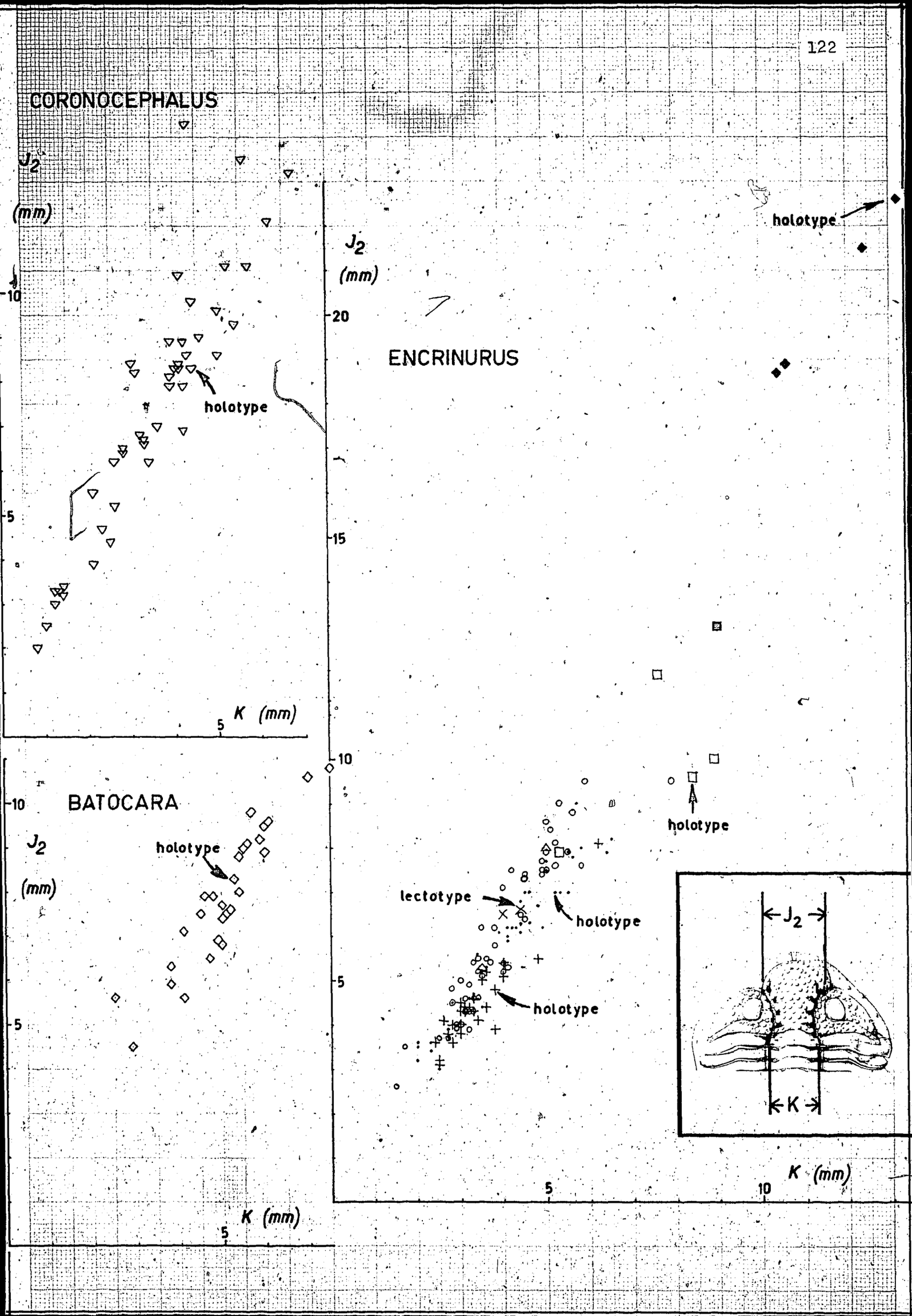
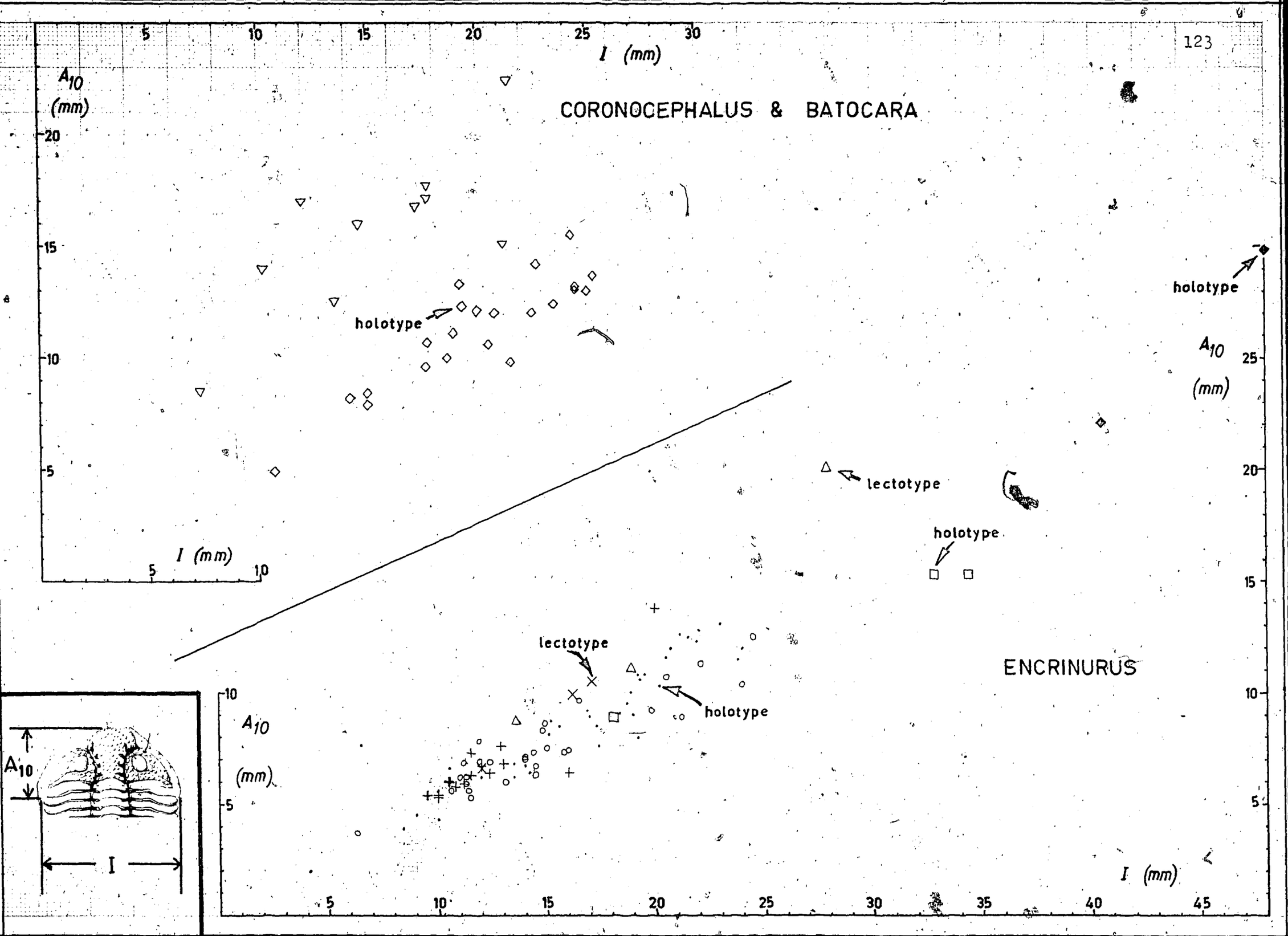
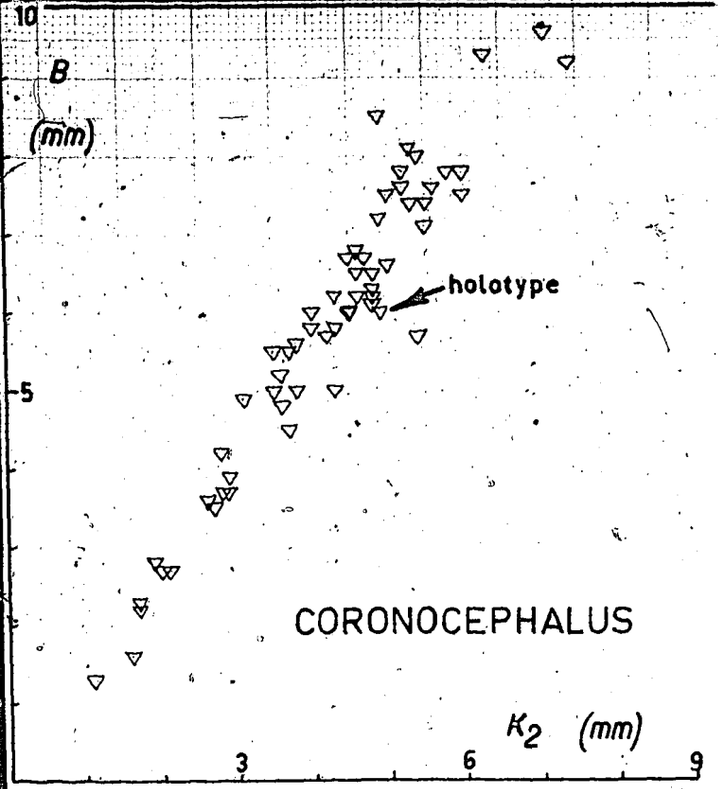
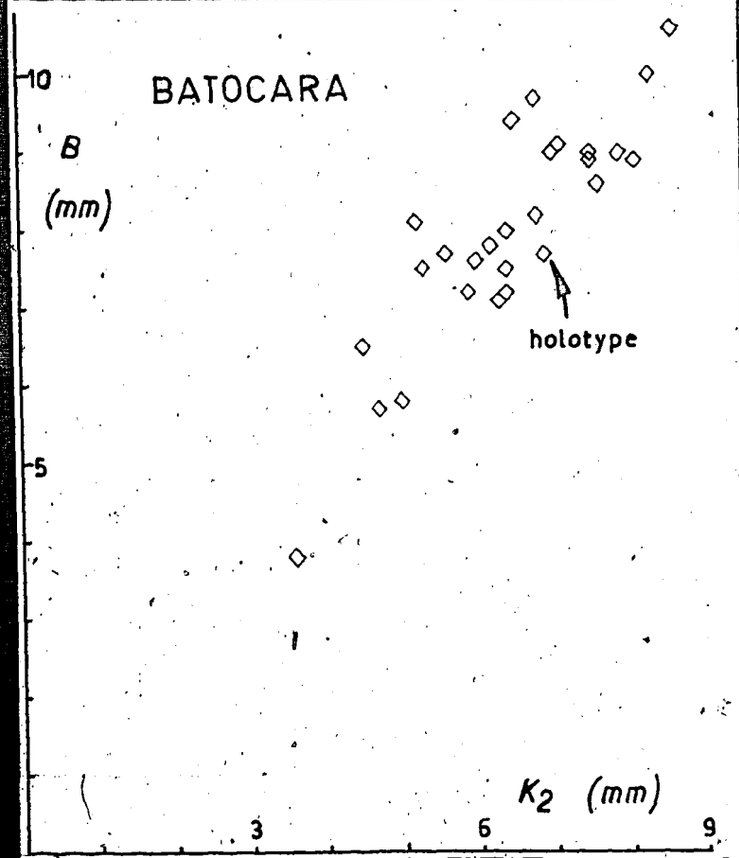
K (mm)
0
5
10

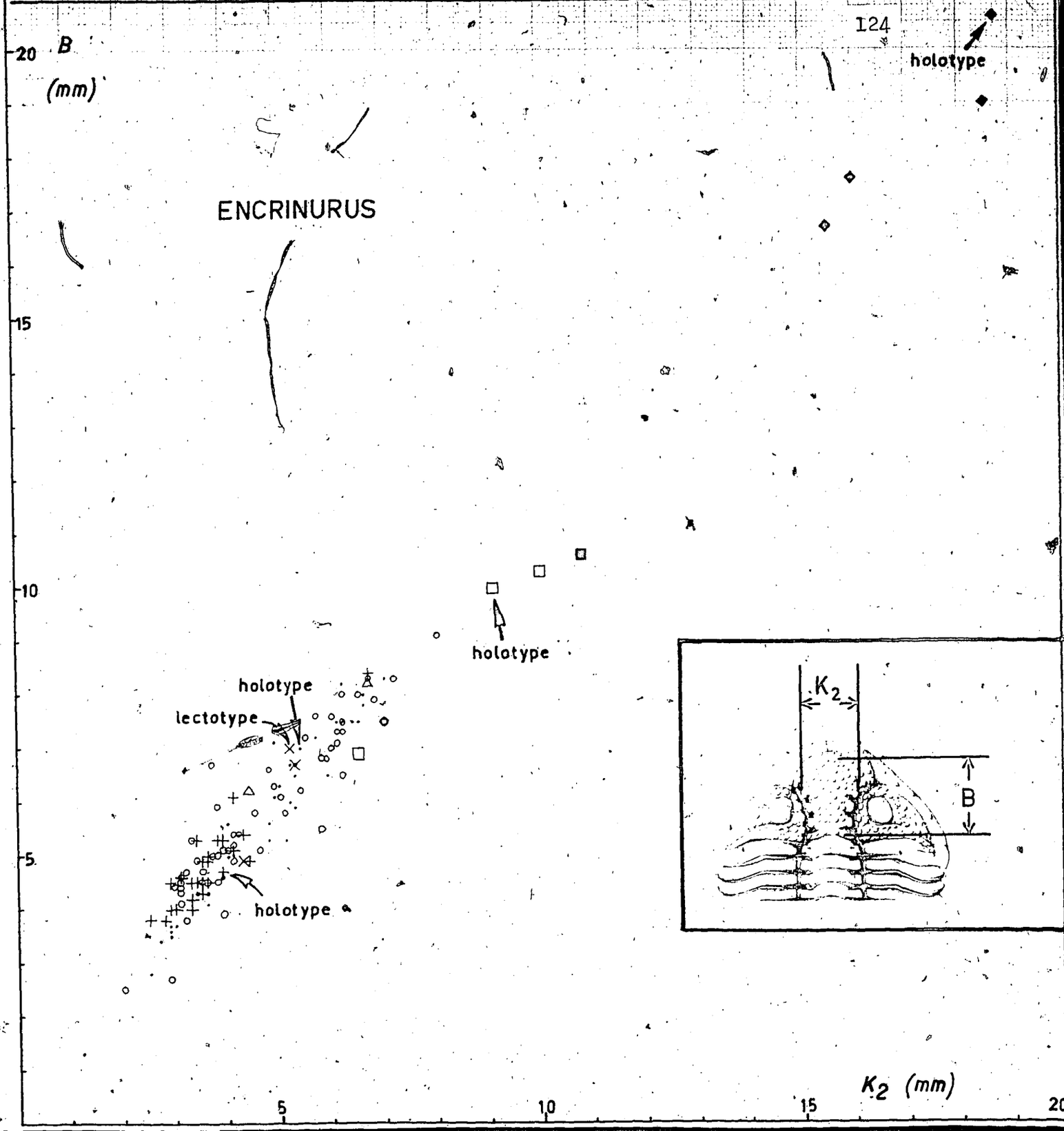

10
BATOCARA
K2
(mm)
holotype
5
K (mm)
0
5

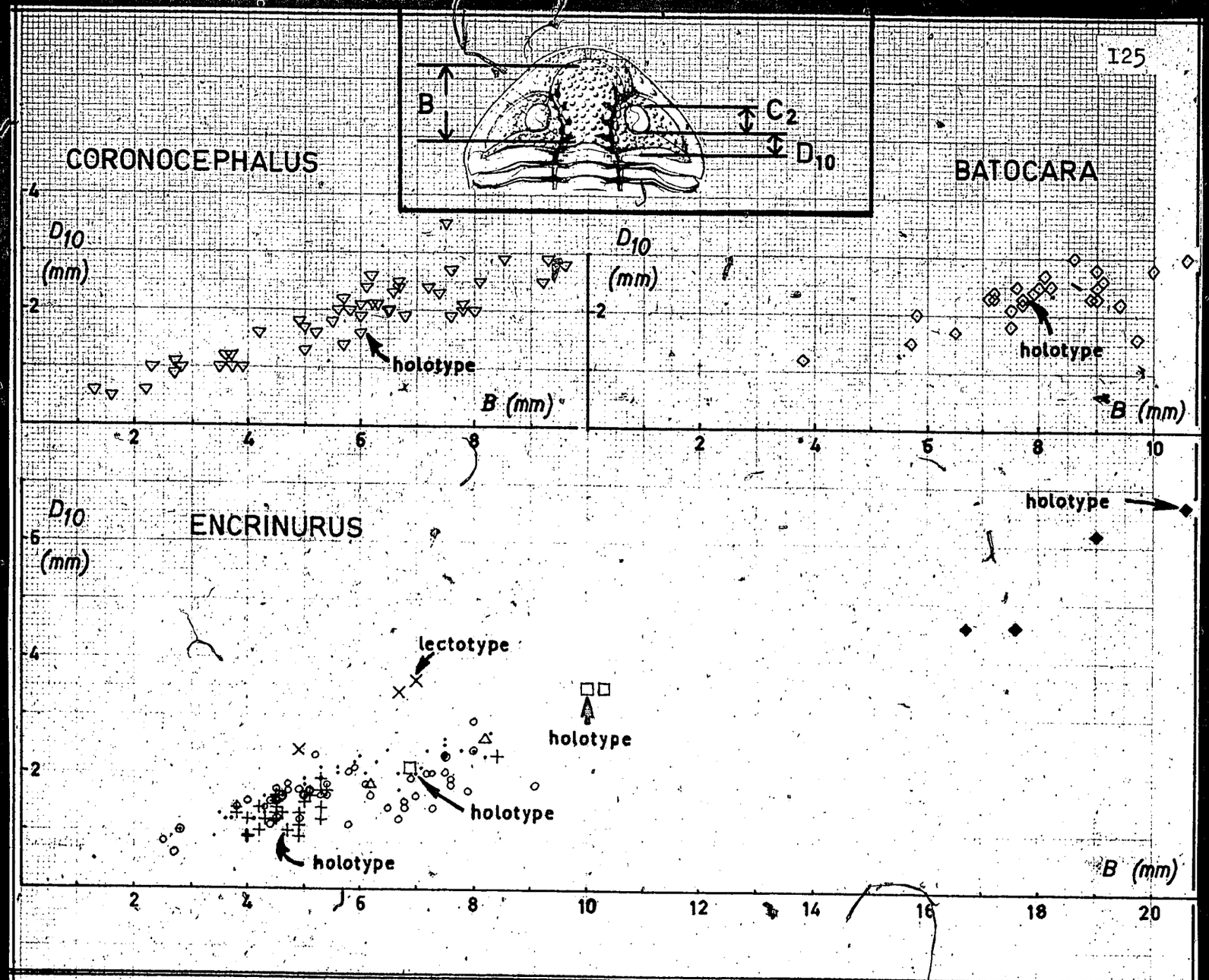

CORONOCEPHALUS
J2
(mm)
10
5
holotype
K (mm)
5
ENCRINURUS
J2
(mm)
20
15
10
5
holotype
holotype
lectotype
holotype
holotype
K (mm)
5
10
J2
K
BATOCARA
J2
(mm)
10
5
holotype
K (mm)
5

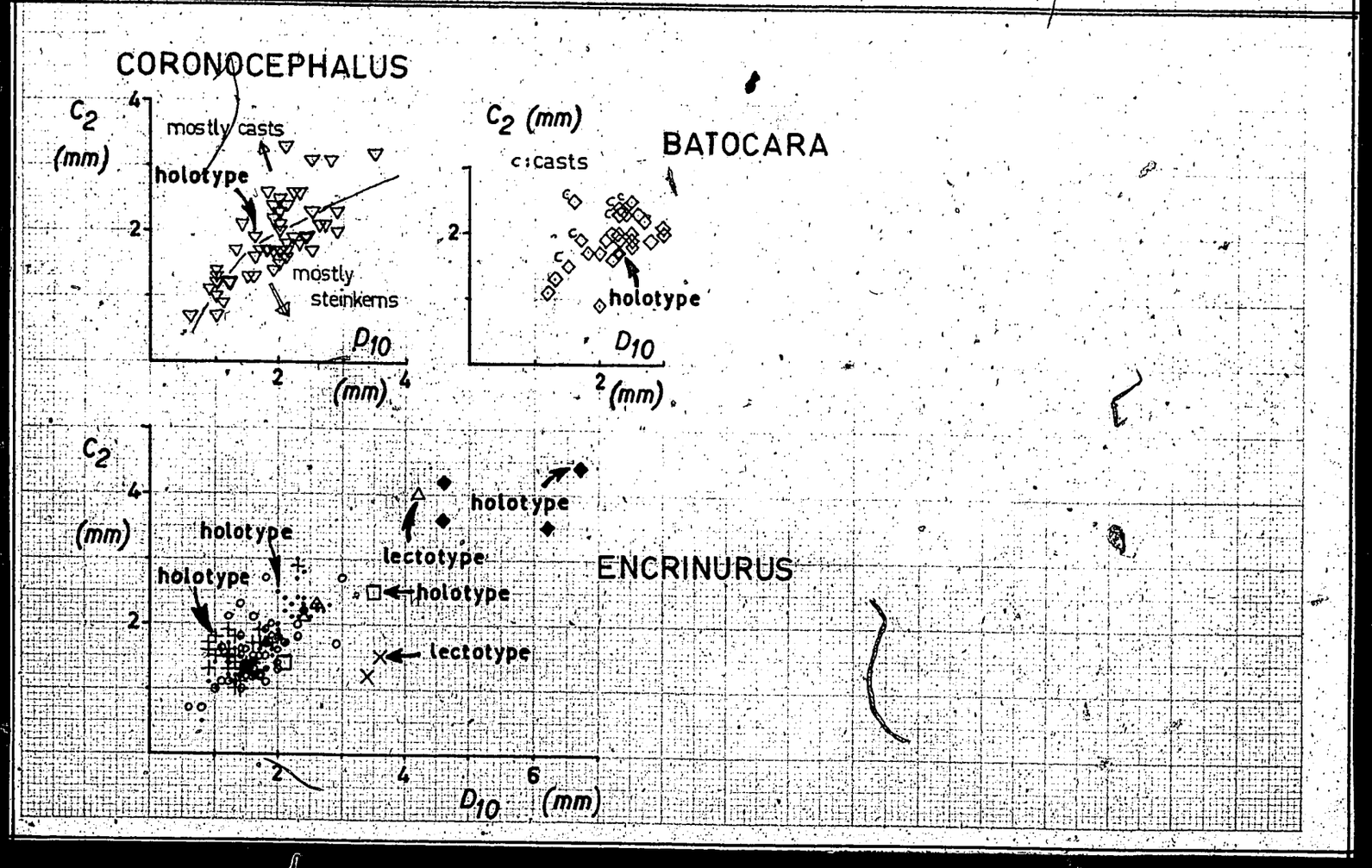

CORONOCEPHALUS & BATOCARA
ENCRINURUS
holotype
lectotype
holotype
holotype
lectotype
holotype
A_{10} (mm)
I (mm)
A_{10}
I

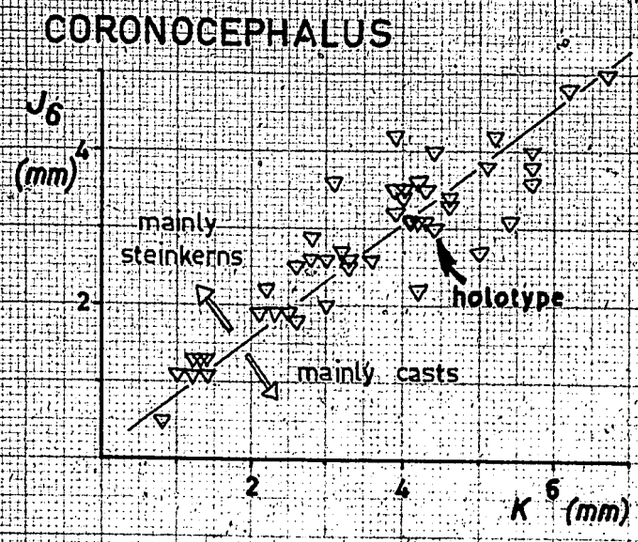

B
(mm)
10
5
holotype
CORONOCEPHALUS
K_2 (mm)
3
6
9

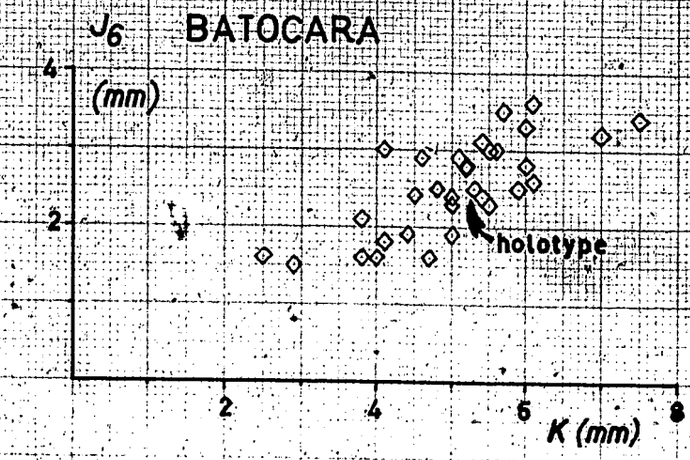

BATOCARA
B
(mm)
10
5
holotype
K_2 (mm)
3
6
9

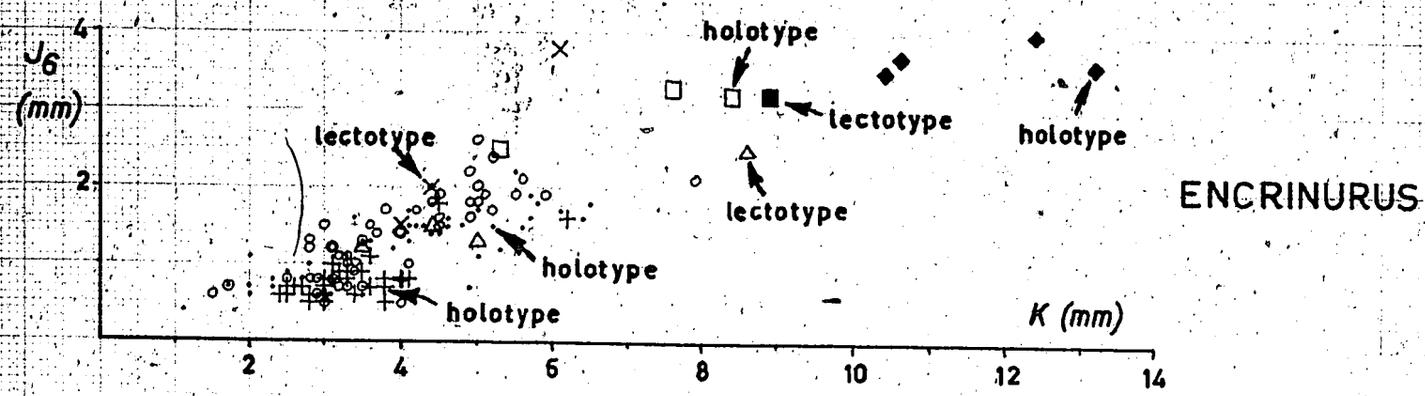

B
(mm)
20
15
10
5
ENCRINURUS
holotype
holotype
lectotype
holotype
K_2
B
K_2 (mm)
5
10
15
20

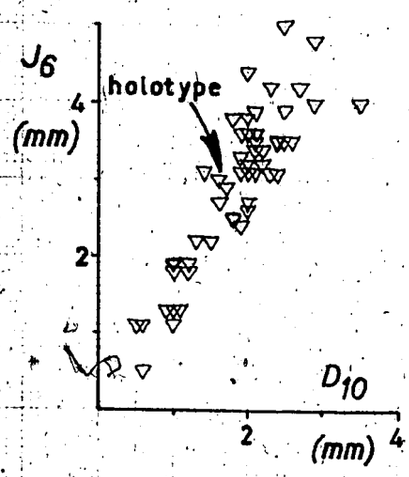

B
C2
D10
CORONOCEPHALUS
BATOCARA
D10 (mm)
holotype
B (mm)
ENCRINURUS
lectotype

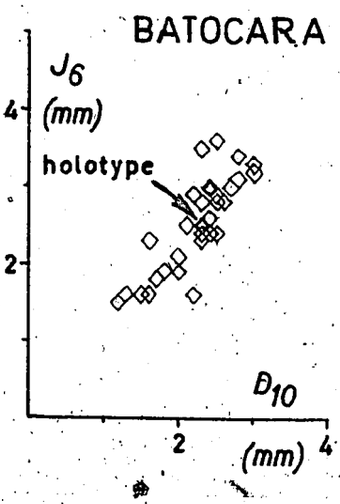

CORONOCEPHALUS
C2 (mm)
mostly casts
holotype
mostly steinkerns
D10 (mm)
BATOCARA
casts
ENCRINURUS
lectotype

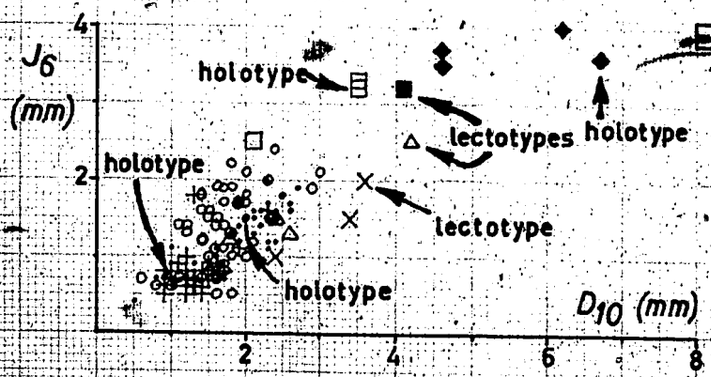

CORONOCEPHALUS
J_6 (mm)
mainly steinkerns
mainly casts
holotype
K (mm)

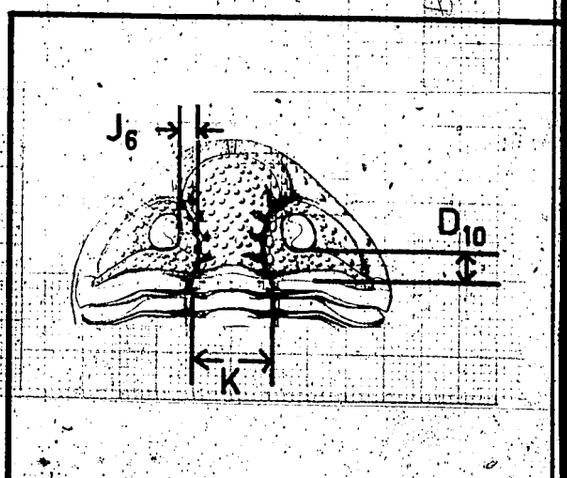

BATOCARA
J_6 (mm)
holotype
K (mm)

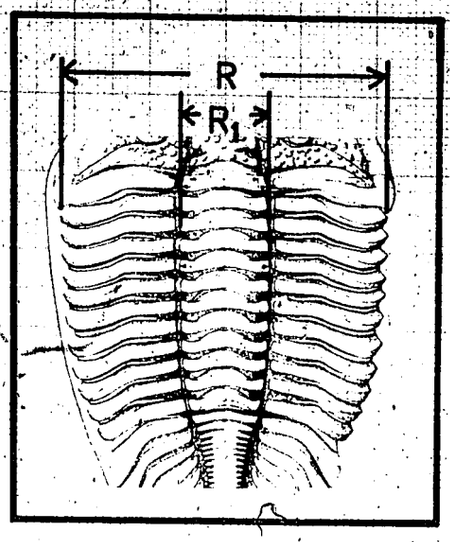

ENCRINURUS
J_6 (mm)
holotype
lectotype
lectotype
holotype
lectotype
holotype
holotype
K (mm)

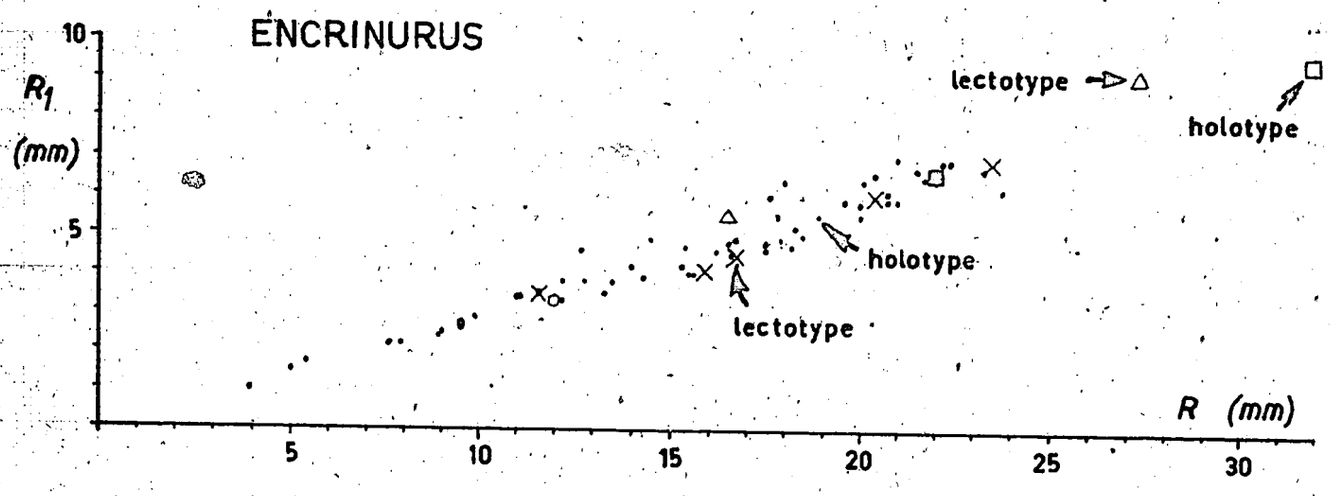

CORONOCEPHALUS
J_6 (mm)
holotype
D_{10} (mm)

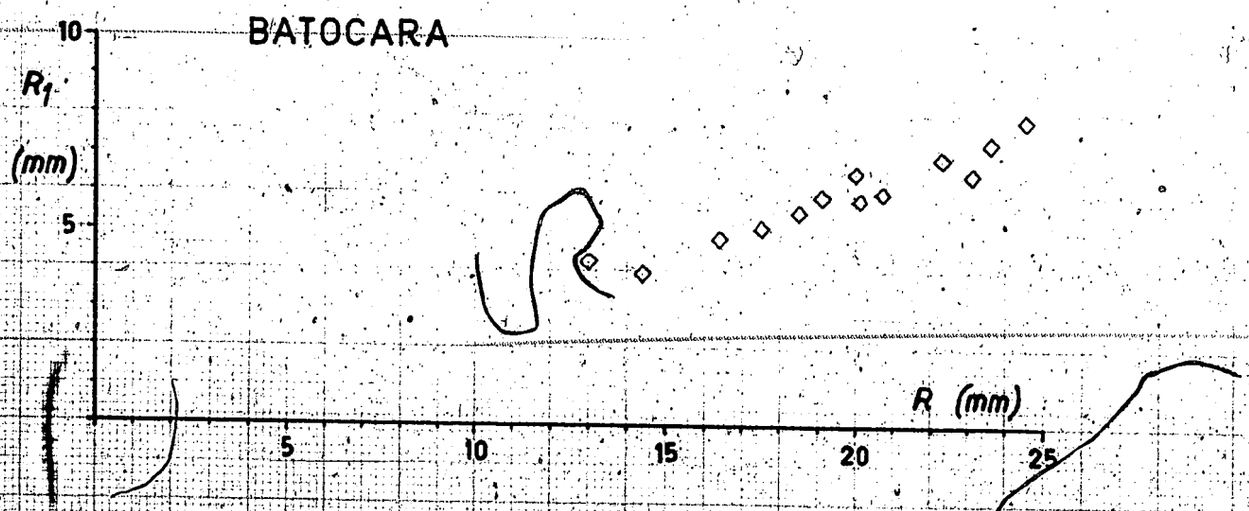

BATOCARA
J_6 (mm)
holotype
D_{10} (mm)

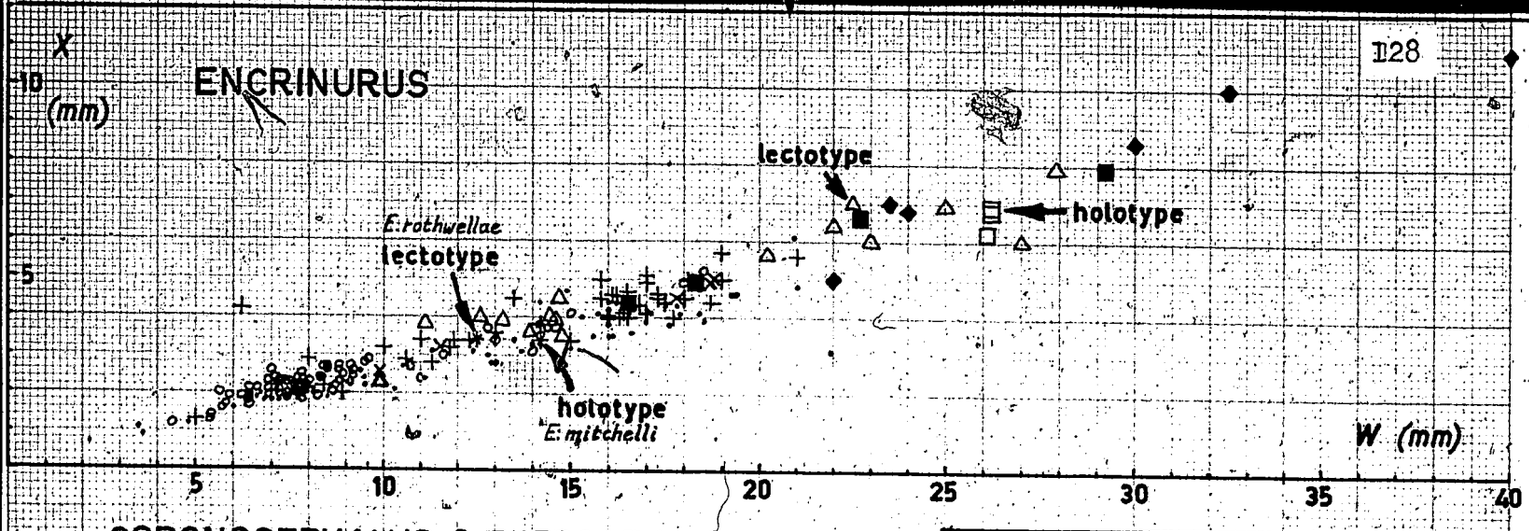

ENCRINURUS
J_6 (mm)
holotype
lectotypes
holotype
holotype
lectotype
holotype
D_{10} (mm)

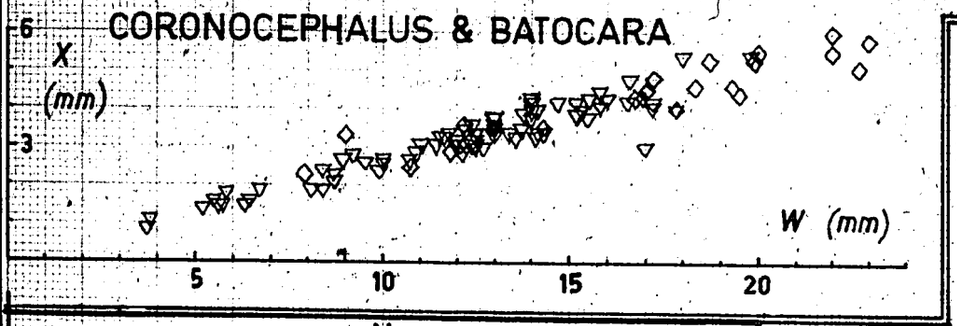

J_6
D_{10}
K

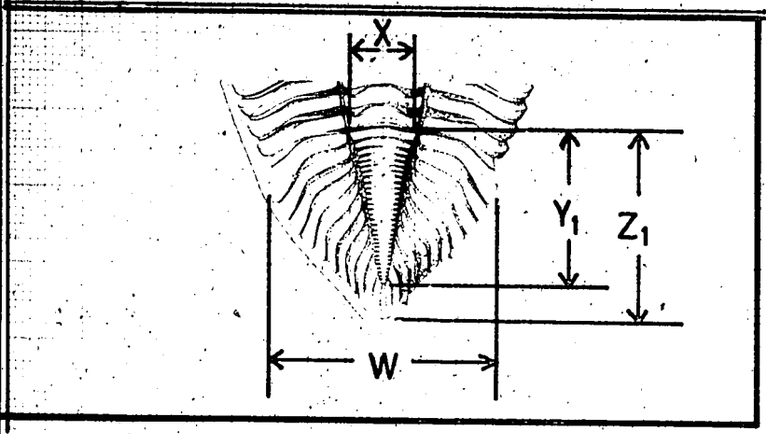

R
R1

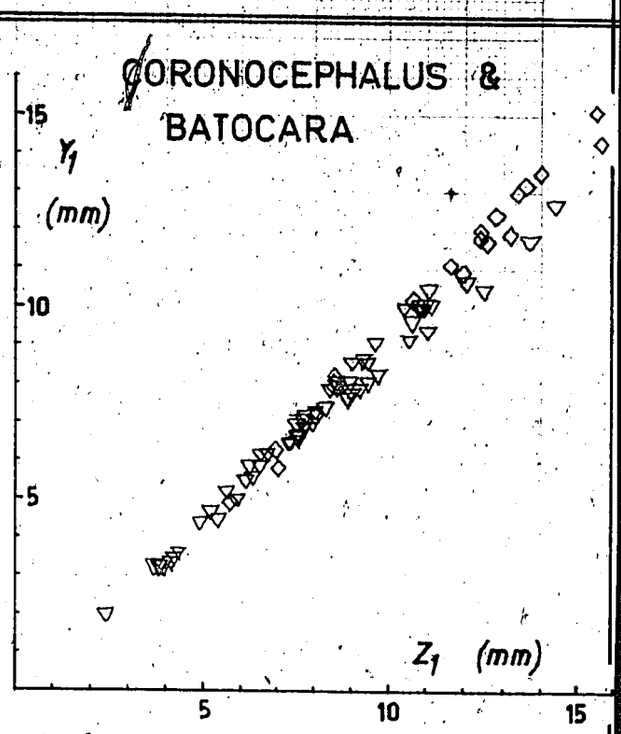

ENCRINURUS
R1 (mm)
10
5
lectotype
holotype
holotype
lectotype
R (mm)
5
10
15
20
25
30

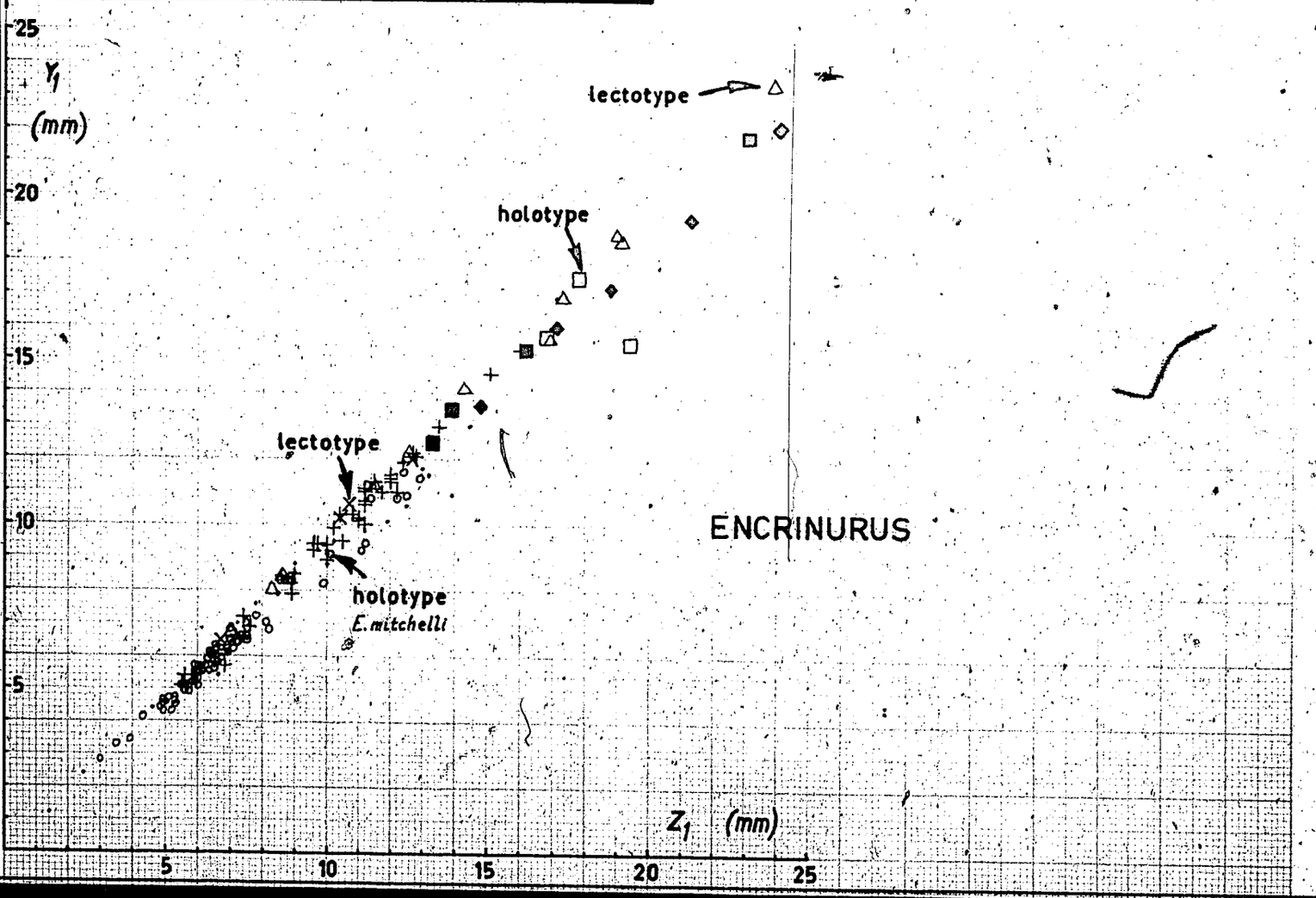

BATOCARA
R1 (mm)
10
5
R (mm)
5
10
15
20
25

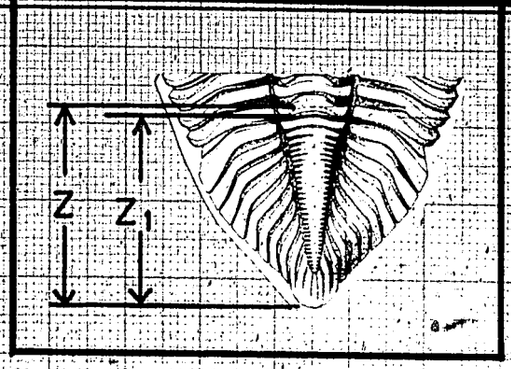

ENCRINURUS
X (mm)
lectotype
holotype
E. rothwellae
lectotype
holotype
E. mitchelli
W (mm)
10
5
5
10
15
20
25
30
35
40

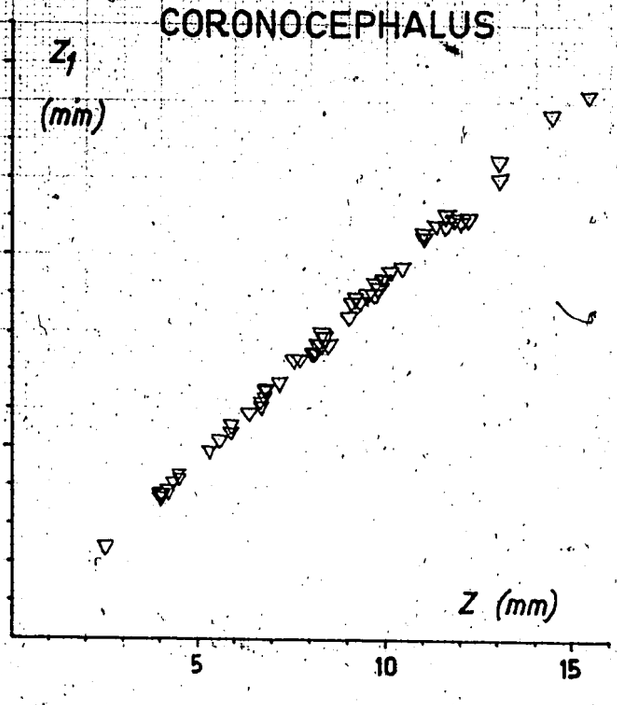

CORONOCEPHALUS & BATOCARA
X (mm)
W (mm)
6
3
5
10
15
20

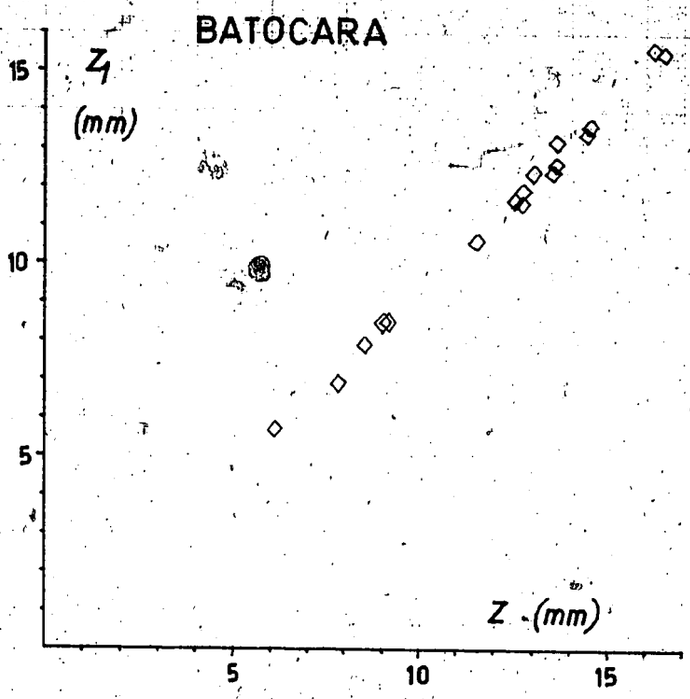

X
Y1
Z1
W

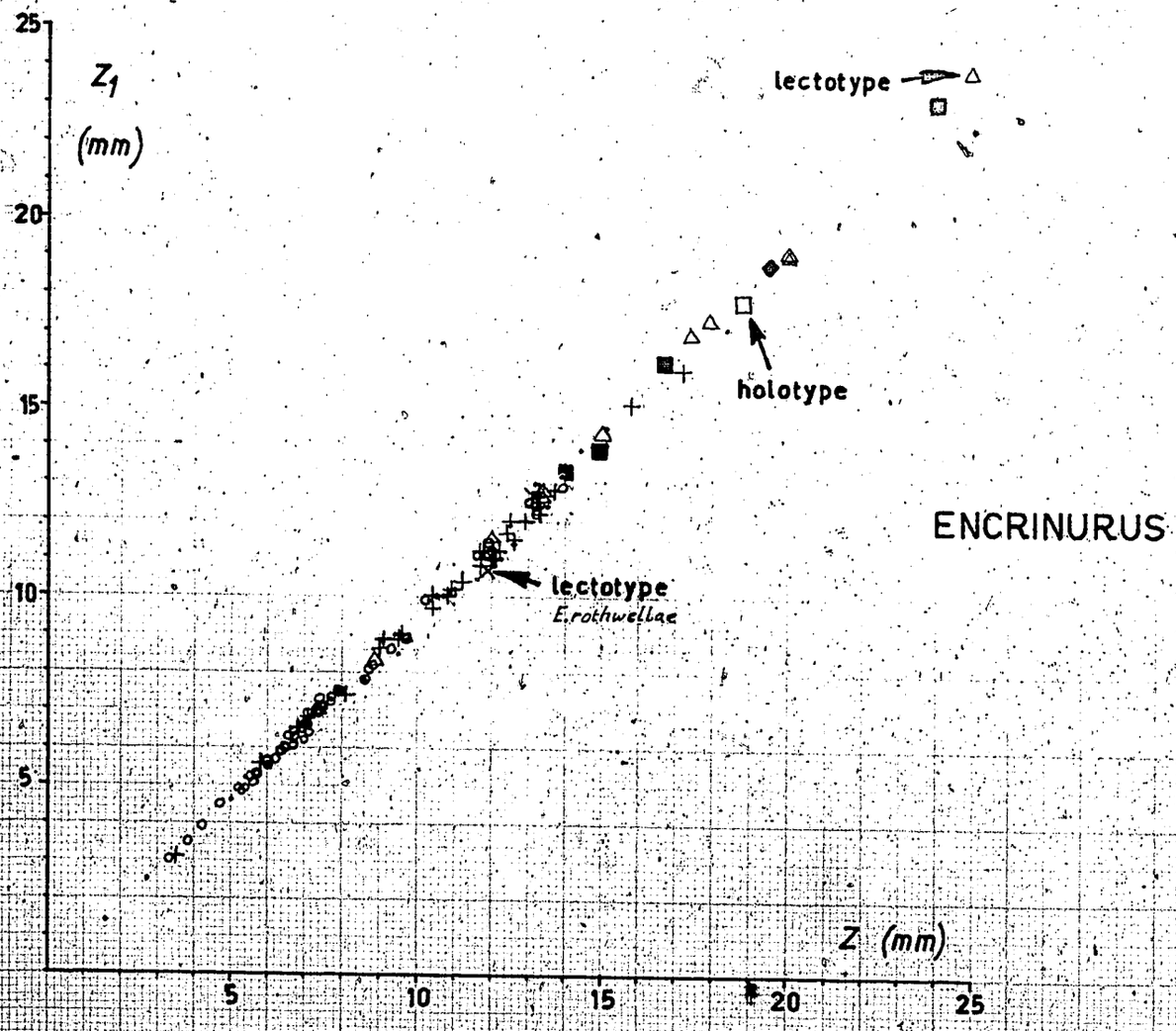

CORONOCEPHALUS & BATOCARA
Y1 (mm)
Z1 (mm)
15
10
5
5
10
15

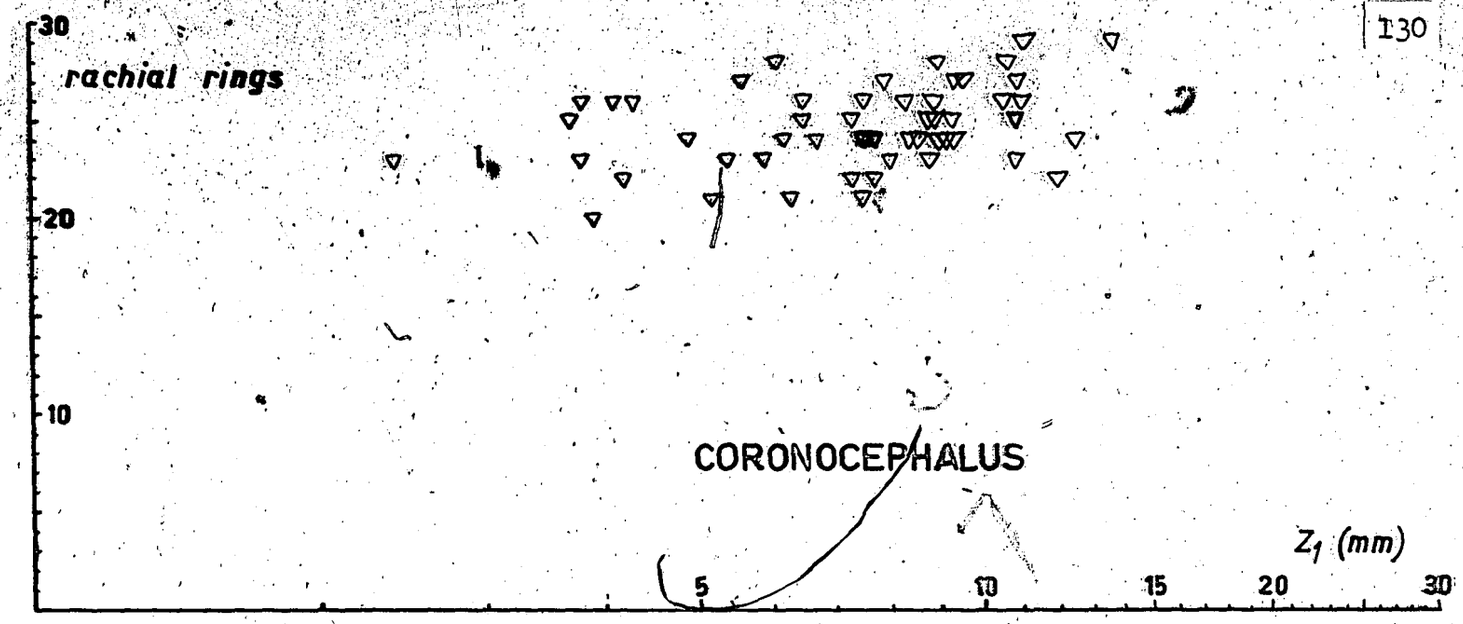

Y1 (mm)
lectotype
holotype
lectotype
holotype
E. mitchelli
ENCRINURUS
Z1 (mm)
25
20
15
10
5
5
10
15
20
25

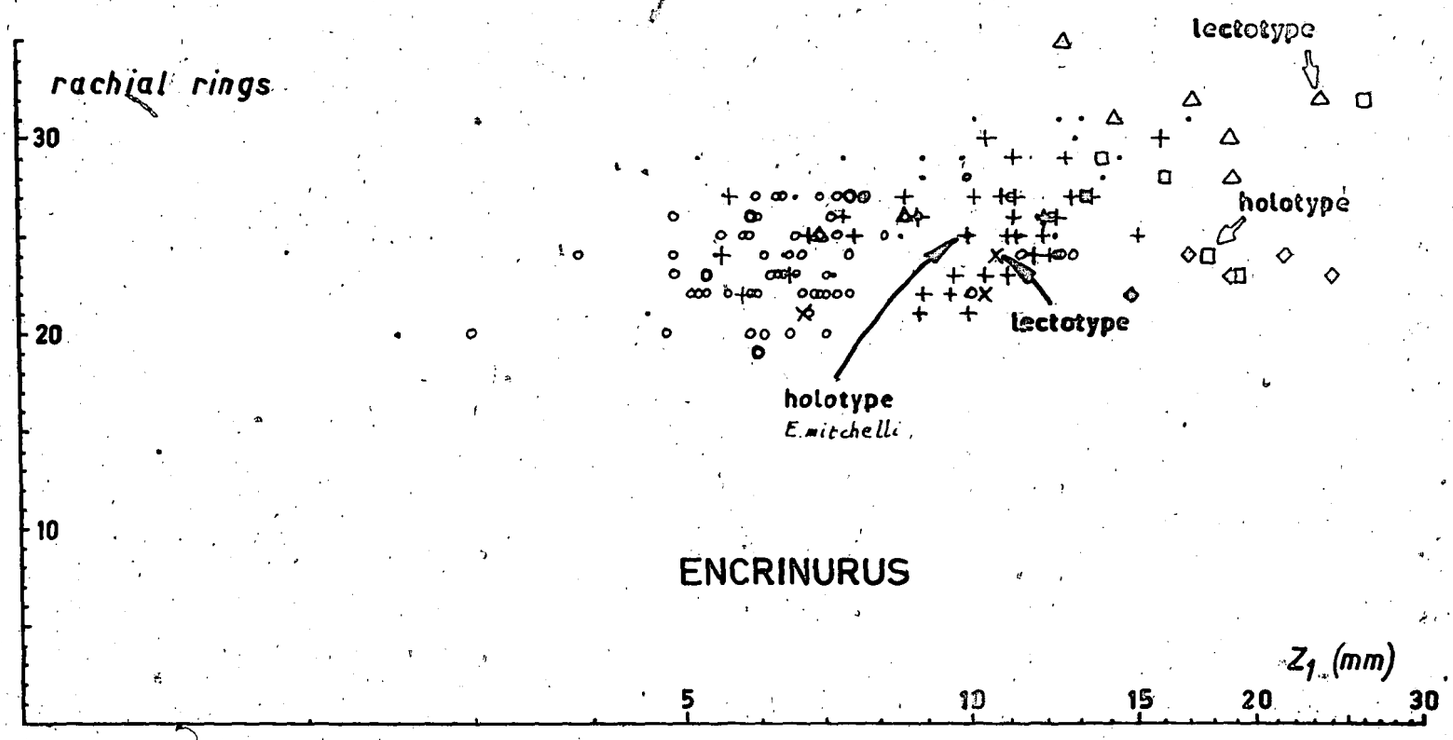

Z
Z1


CORONOCEPHALUS
Z1
(mm)
15
10
5
Z (mm)
5
10
15


BATOCARA
Z1
(mm)
15
10
5
Z (mm)
5
10
15


Z1
(mm)
25
20
15
10
5
lectotype
holotype
ENCRINURUS
lectotype
E.rothwellae
Z (mm)
5
10
15
20
25


rachial rings
30
20
10
CORONOCEPHALUS
Z_1 (mm)
5
10
15
20
30


rachial rings
30
20
10
lectotype
holotype
lectotype
holotype
E. mitchelli
ENCRINURUS
Z_1 (mm)
5
10
15
20
30

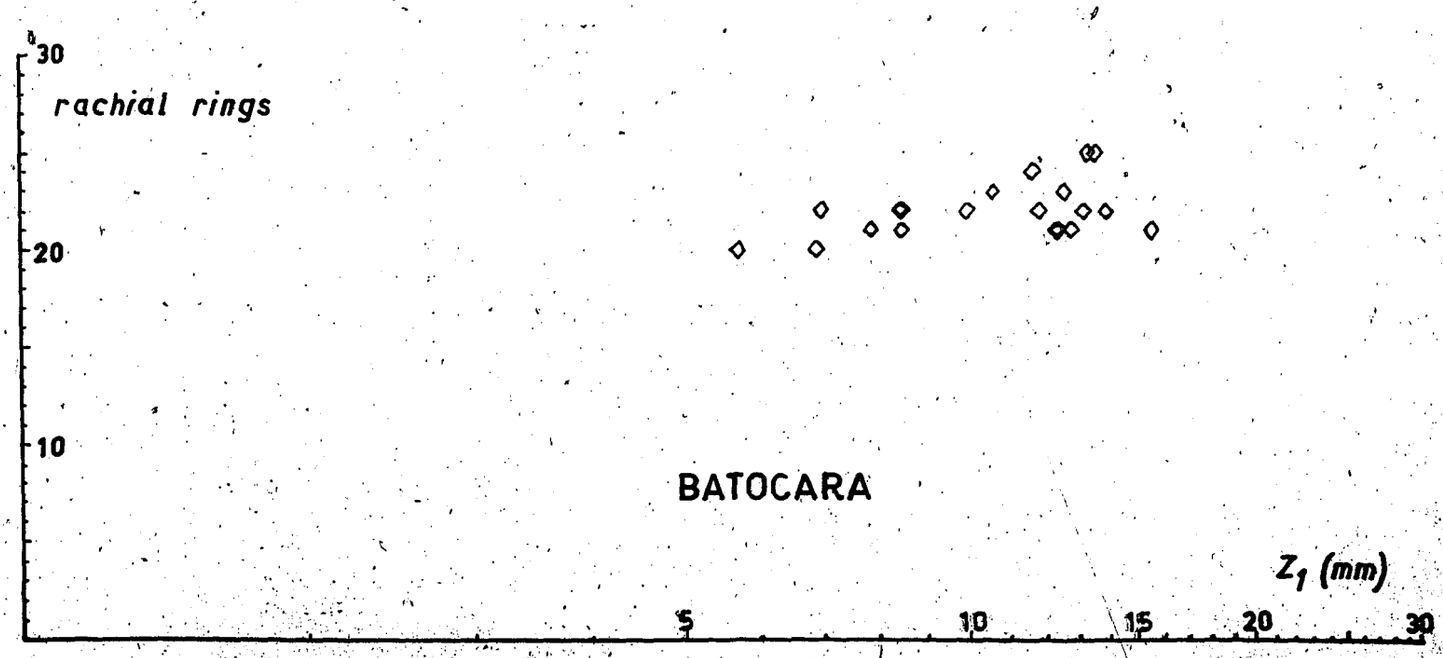
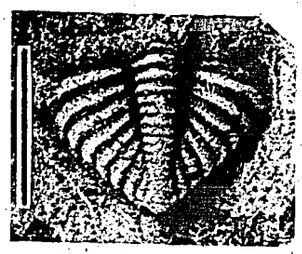

rachial rings
30
20
10
BATOCARA
Z_1 (mm)
5
10
15
20
30

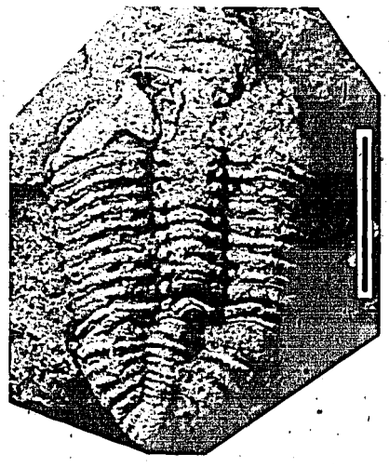
PLATE 1

5mm bar gives scale

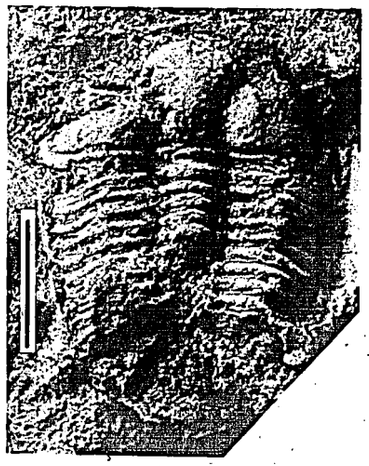
A *CROMUS SPRYI*



NMP465
latex replica

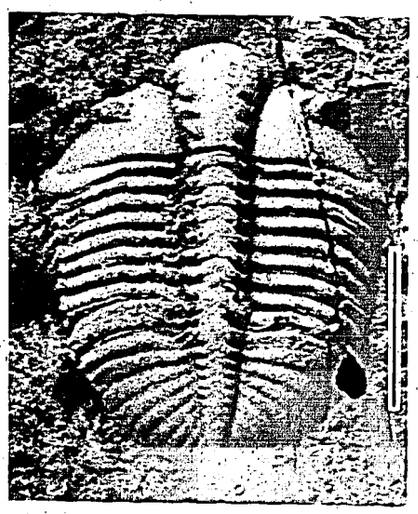


NMP471
internal mould



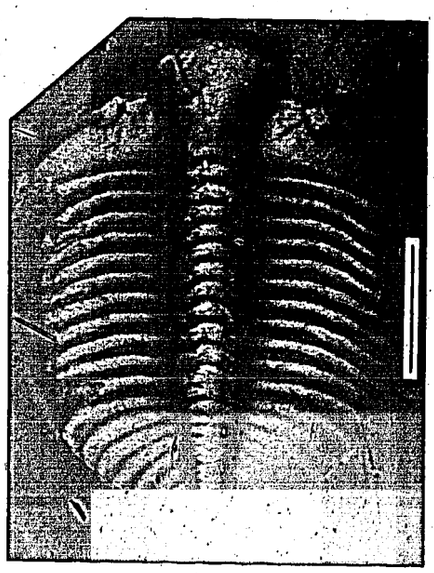
NMP473
internal mould

NMP26097
latex replica

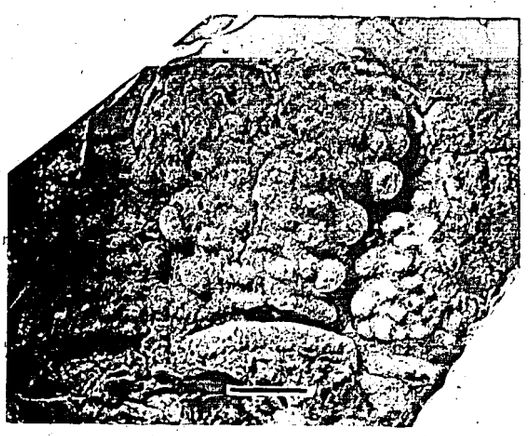


NMP26098
internal mould

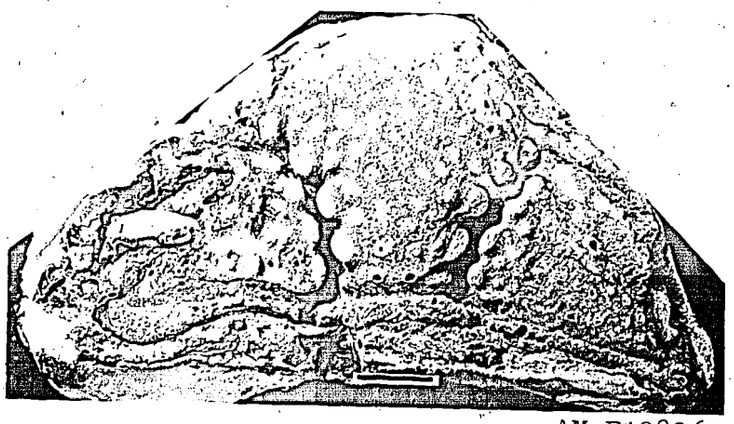
NMP26091
internal mould



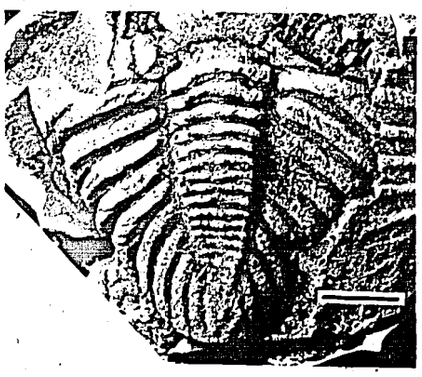
B *ENCRINURUS BORENORENSIS*



AM F42697
latex replica



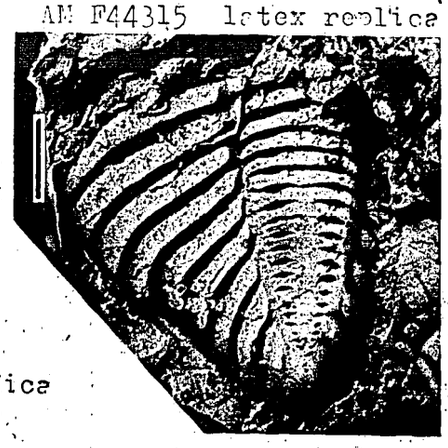
AM F42896
plaster
replica



AM F42908
latex replica

AM F42703
plaster
replica

AM F44315 latex replica



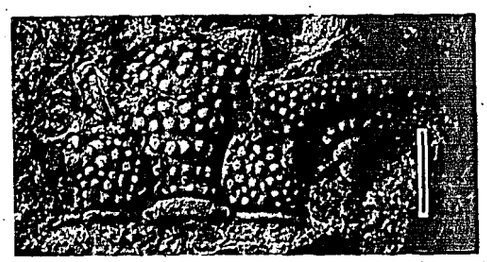
AM F42904
latex replica

PLATE 2

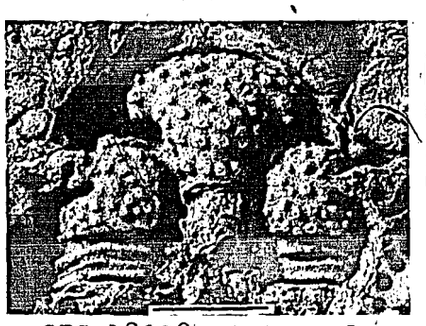
CORONOCEPHALUS URBIS

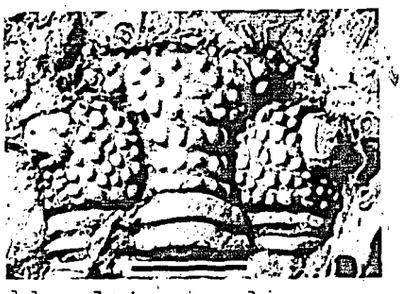
PARATYPE CEPHALONS

Bar gives scale



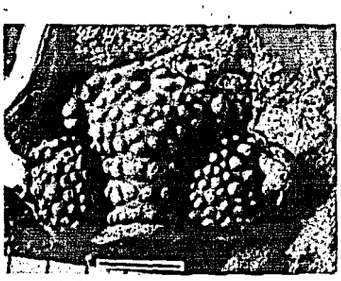
CPC 18046 latex replica



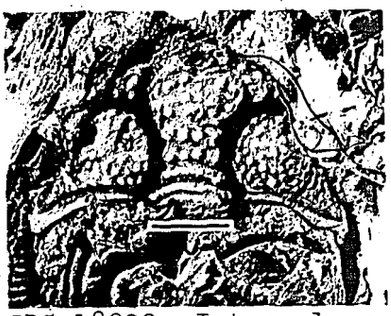


CPC 18038 internal mould + latex replica

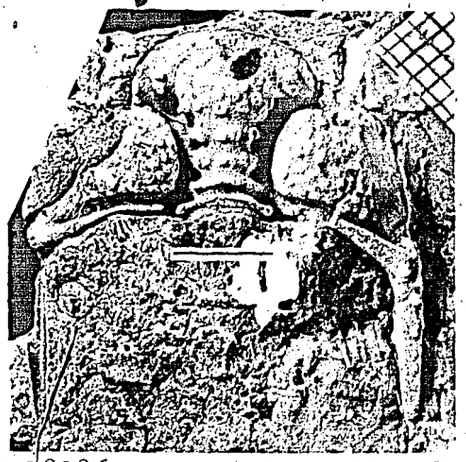
CPC 18078 internal mould

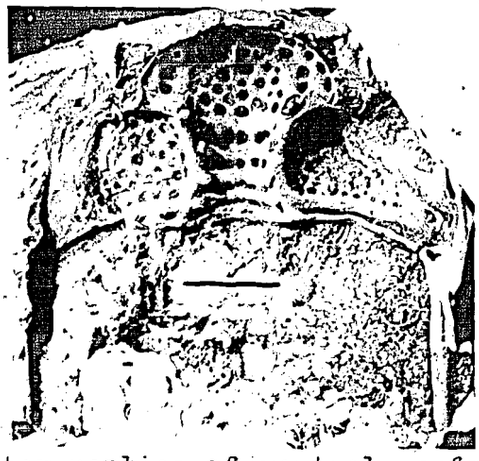


CPC 18090 internal mould + counterpart
CPC 18063 latex replica



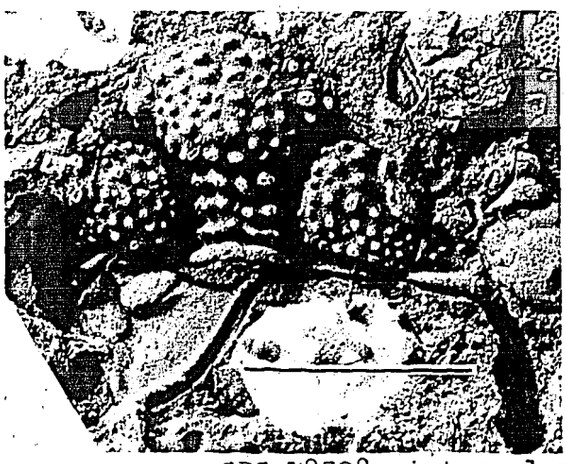
CPC 18099 Internal mould

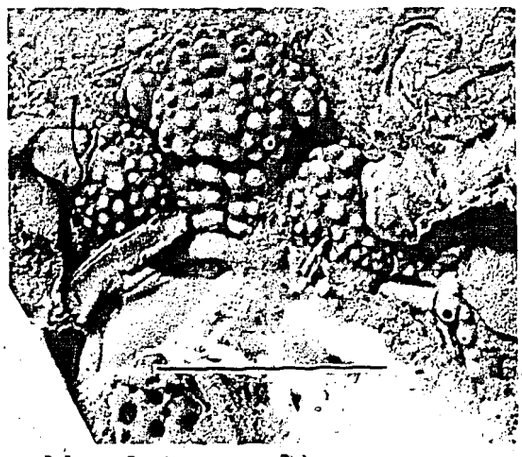




CPC 18086 internal mould + latex replica of ventral surface

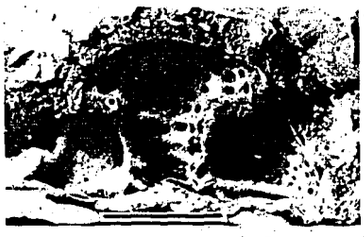
CPC 18037
latex replica





CPC 18528 internal mould + latex replica

CPC 18079 latex replica



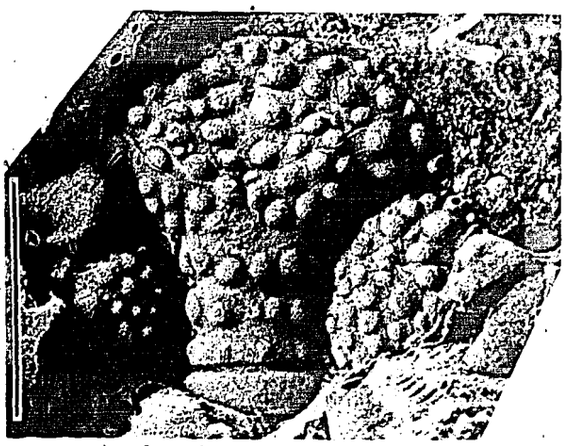
CPC 18553 internal mould + latex replica of ventral surface

PLATE 3

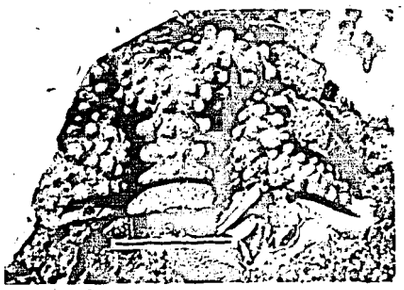
CORONOCEPHALUS URBIS

PARATYPE CEPHALONS

5mm bar gives scale

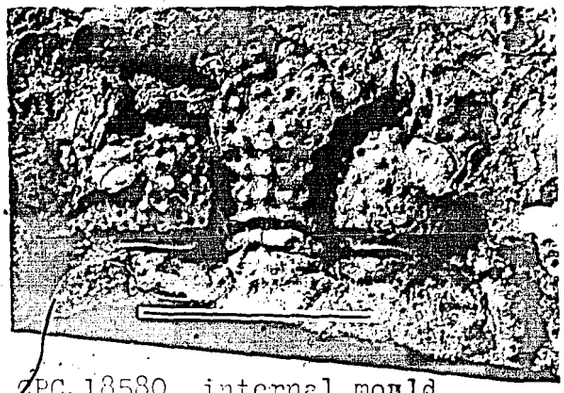


CPC 18436 latex replica

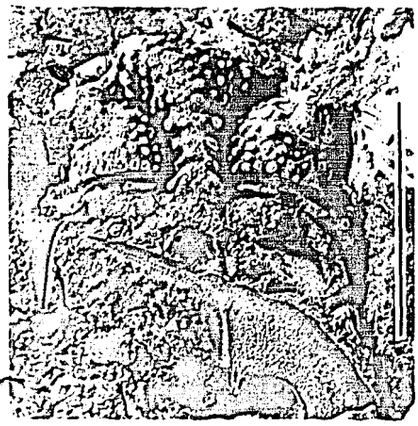


CPC 18534 latex replica

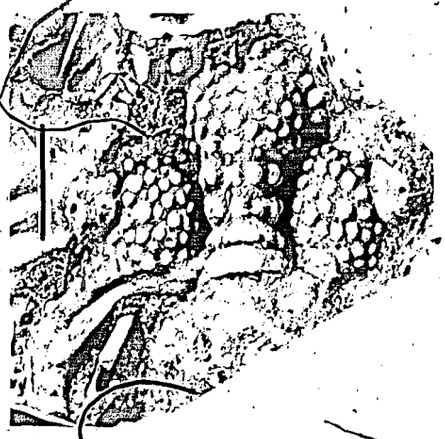
CPC 18558 internal mould of juvenile

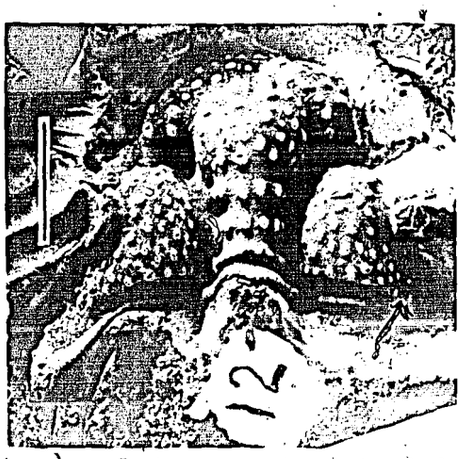


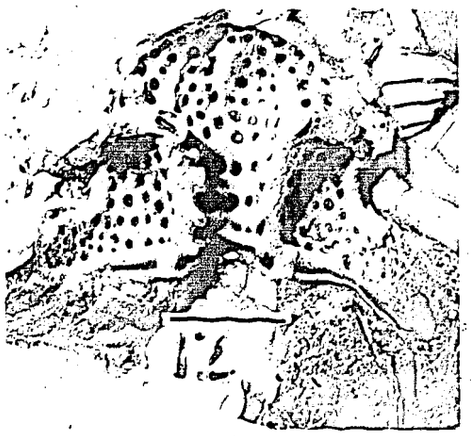
CPC 18580 internal mould



CPC 18568 internal mould of juvenile







CPC 18591 internal mould (centre) + latex replicas of dorsal (left) and ventral surfaces

CPC F24688
latex replica
loc. 7448.0257

CORONOCEPHALUS sp. cf. *URBIS*

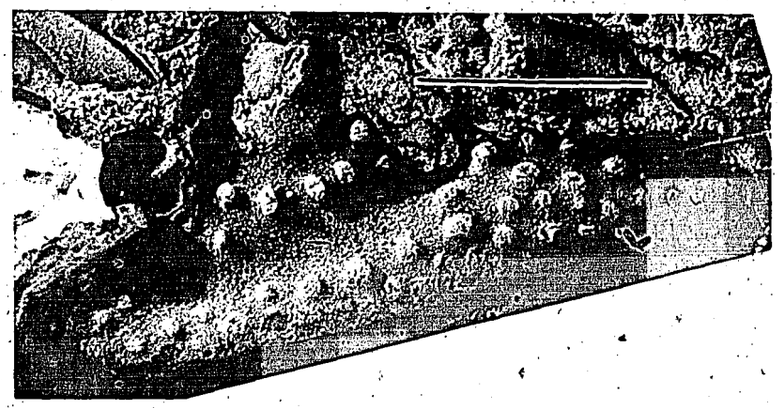
F24279
internal mould
loc. 7448.0051

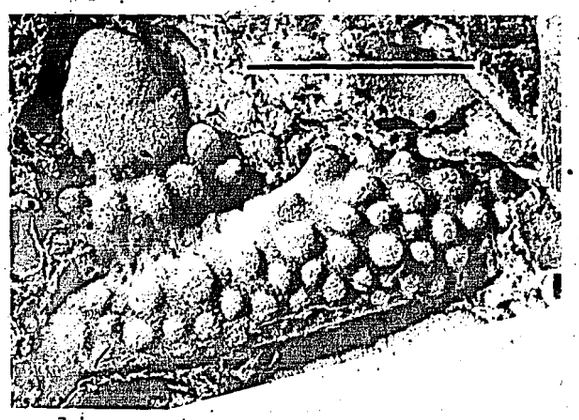
PLATE 4

CORONOCEPHALUS URBIS PARATYPES

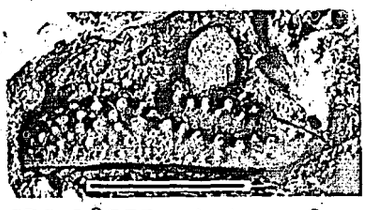
5mm bar gives scale

LIBRIGENAE & HYPOSTOMATA





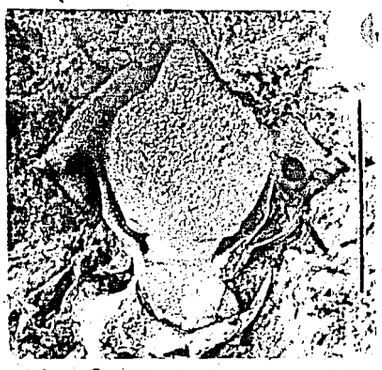
CPC 18048 internal mould + latex replica



CPC 18555 internal mould

CPC 18585 internal mould

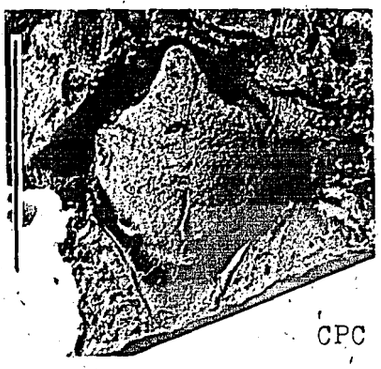
CPC 18576 internal mould

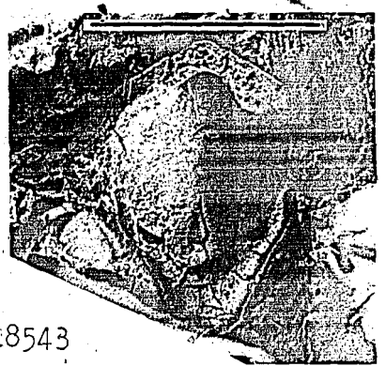


CPC 18050 latex replica of ventral surface.

CPC 18088 latex replica of ventral surface

CPC 18566 internal mould





CPC 18543

mould and latex replica of interior

CPC 18089 latex replica of interior

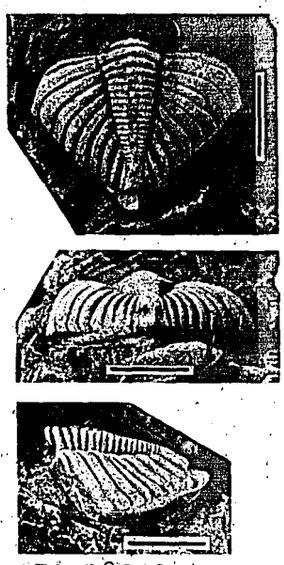
CPC 18579 moulds of interior (left) and ventral (right) surfaces

PLATE 5

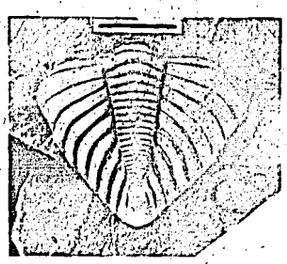
CORONOCEPHALUS URBIS PARATYPES

PYGIDIA (EXTERNALS)

5mm bar gives scale

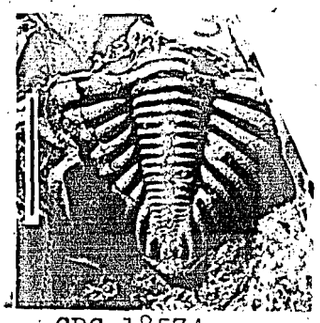


CPC 18040

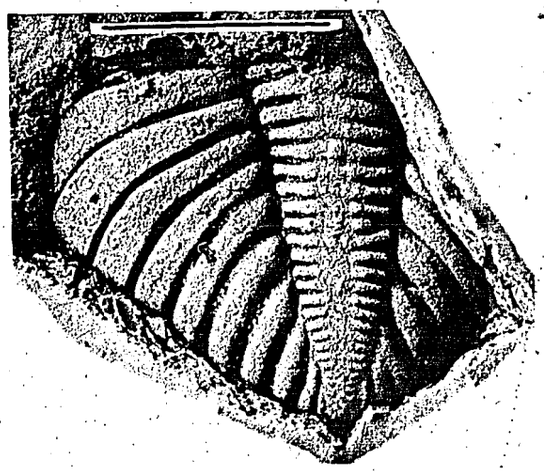


CPC 18055

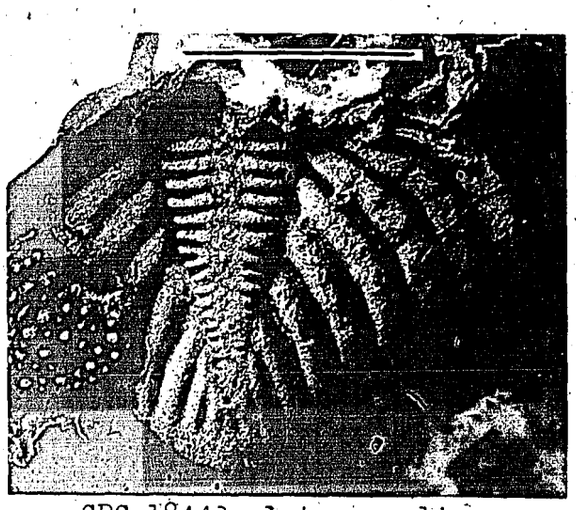
CPC 18093 latex replica



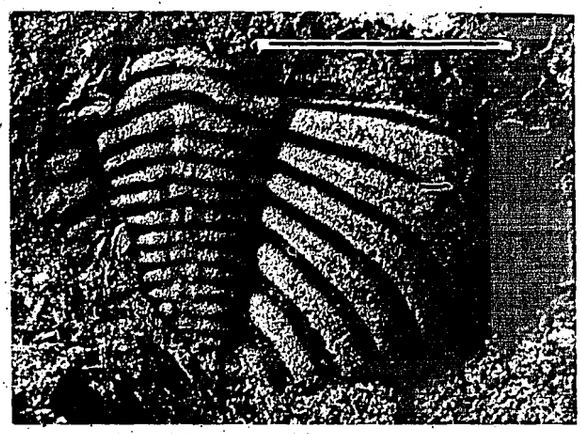
CPC 18574
latex replica



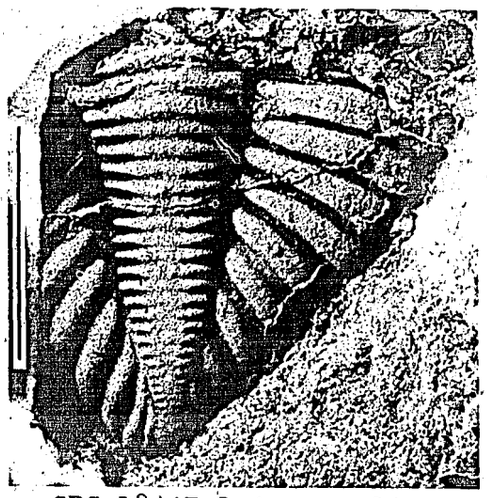
CPC 18438
latex replica



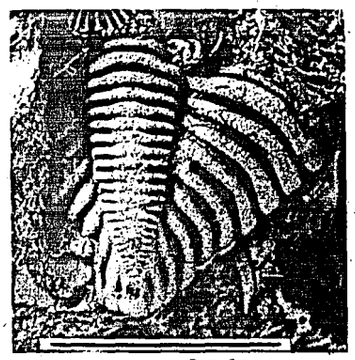
CPC 18443 latex replica



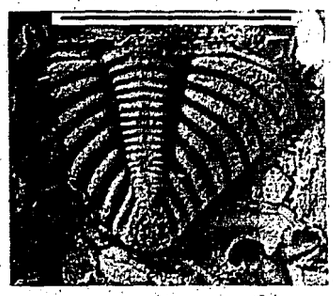
CPC 18444 latex replica



CPC 18447 latex replica

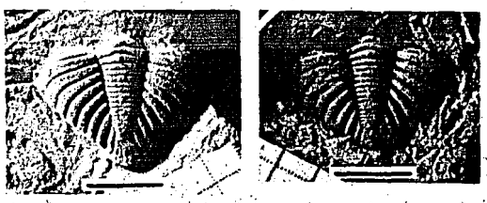


CPC 18567
latex replica



CPC 18586
latex replica

CPC 18056 + 18073 (counter-parts): latex replica and internal mould



CPC 18061 cleaned dorsal surface + latex replica from external mould

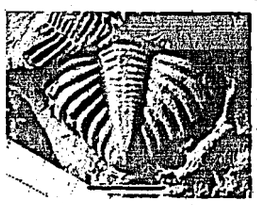
PLATE 6

CORONOCEPHALUS URBIS PARATYPES

5mm bar gives scale

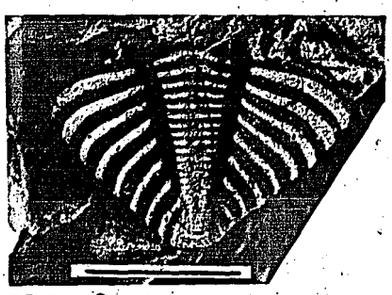
PYGIDIA (INTERNAL MOULDS)

CPC 18053

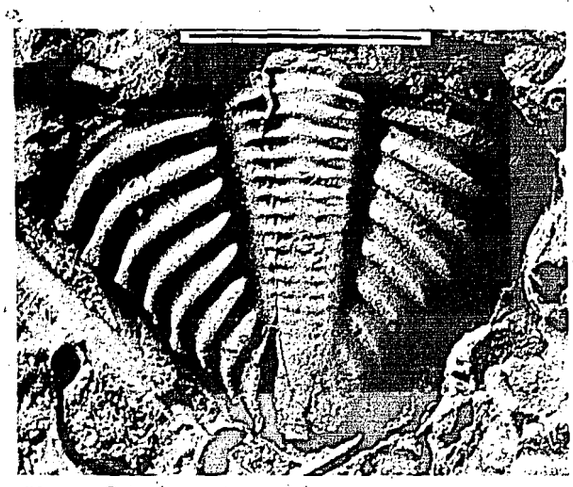


CPC 18054

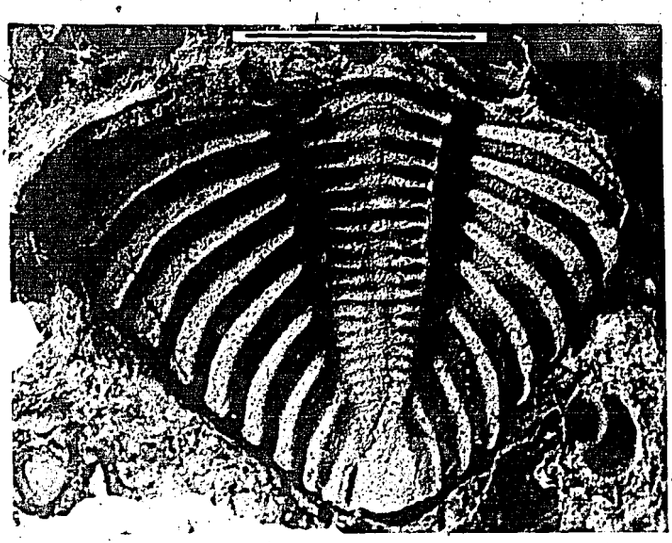
CPC 18074



CPC 18097

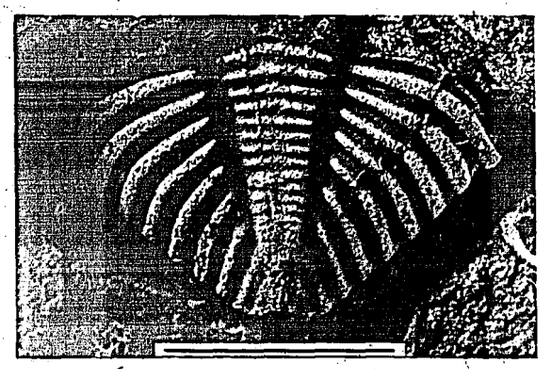


CPC 18529

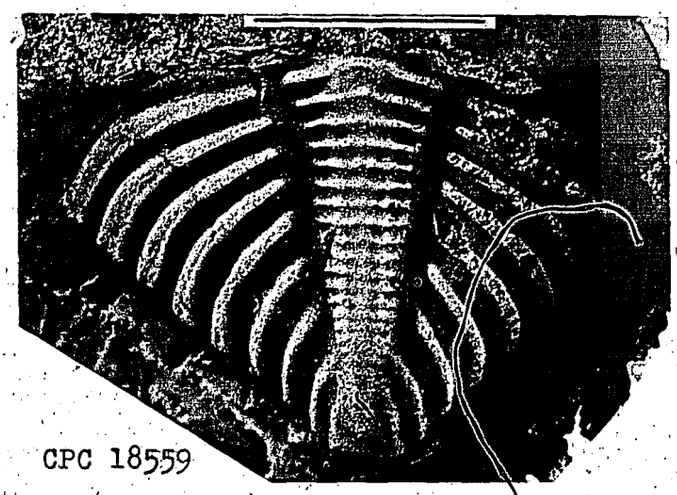


CPC 18442

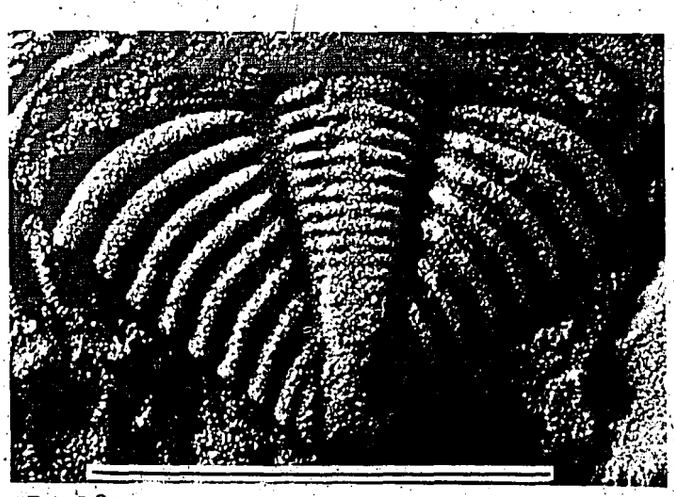
CPC 18556



CPC 18548



CPC 18559



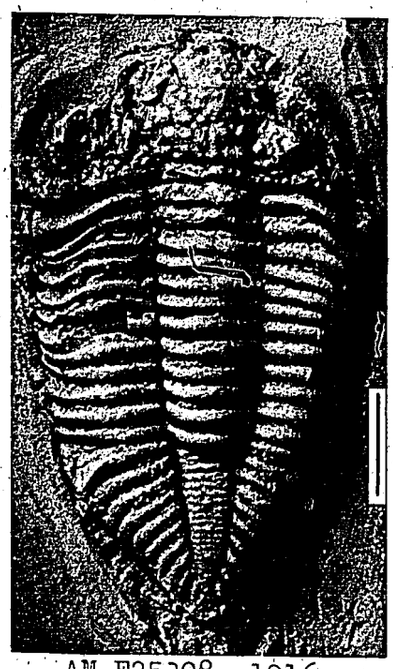
CPC 18545 juvenile

PLATE 7

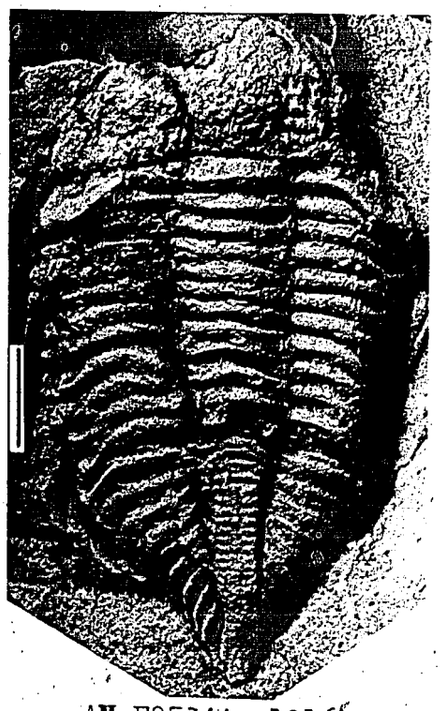
ENCRINURUS MITCHELLI

5mm bar gives scale

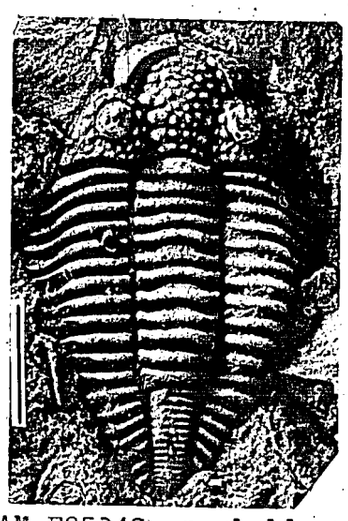
SPECIMENS FIGURED ETHERIDGE & MITCHELL (1916) OR MITCHELL (1924)



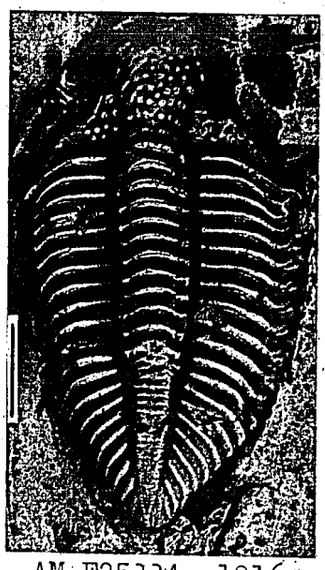
AM F25308 1916, pl.55, fig.3



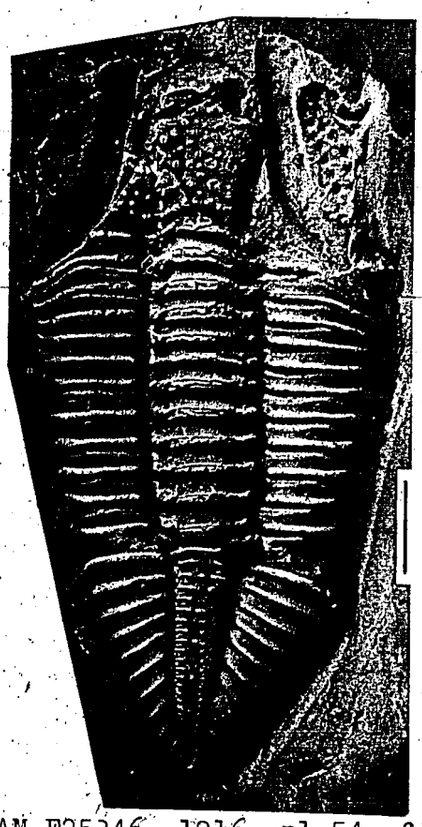
AM F25344 1916, pl.55, fig.1



AM F25349 probable counterpart of F25353 (1916, pl.54, fig.5)



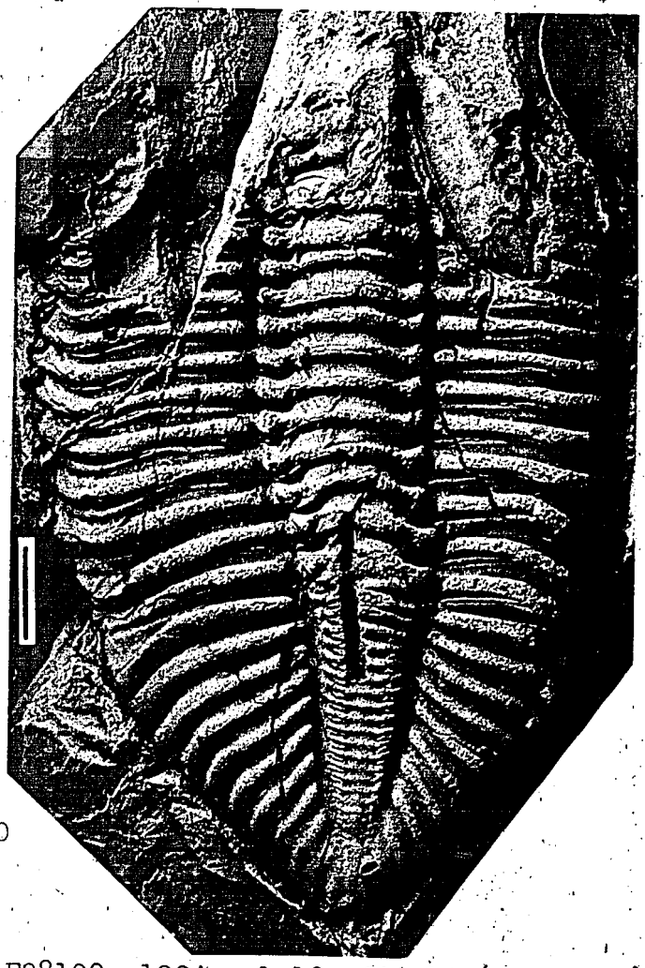
AM F25334 1916, pl.54, fig.2



AM F25346 1916, pl.54, fig.1

AM F25348 1916, pl.54, fig.3

AM F25311 1916, pl.56, fig.10



AM F28120 1924, pl.10, fig.14 (pygidium)

AM F25306B 1916, pl.55, fig.15?

AM F25329 1916, pl.57, fig.9

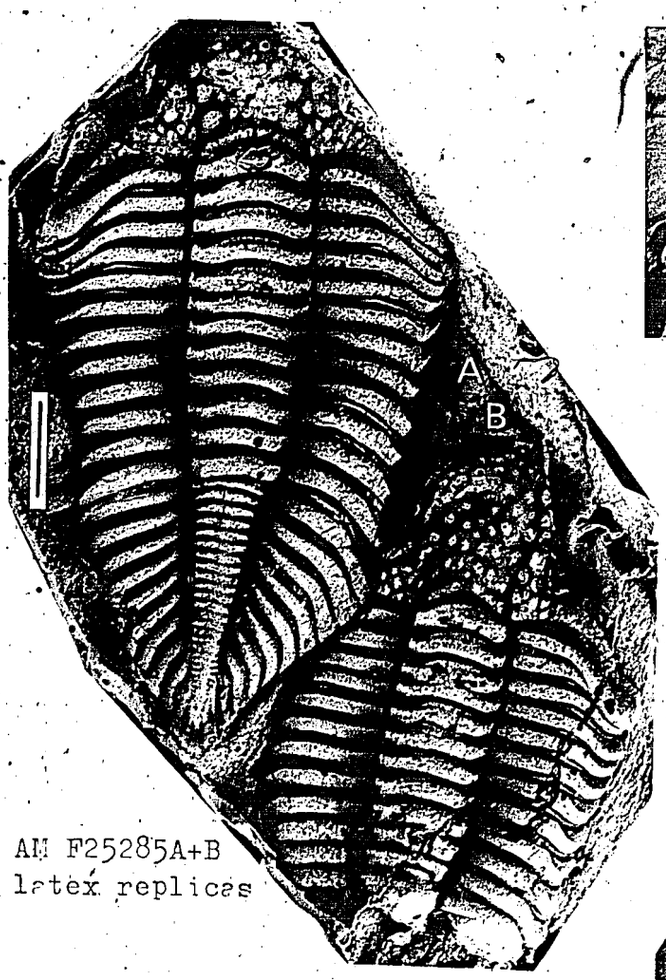
AM F25354 1916, pl.56, fig.13 (syntype of *E. duntroonensis*)

PLATE 8

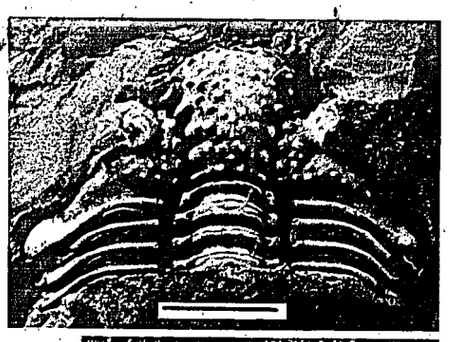
ENCRINURUS MITCHELLI

5mm bar gives scale

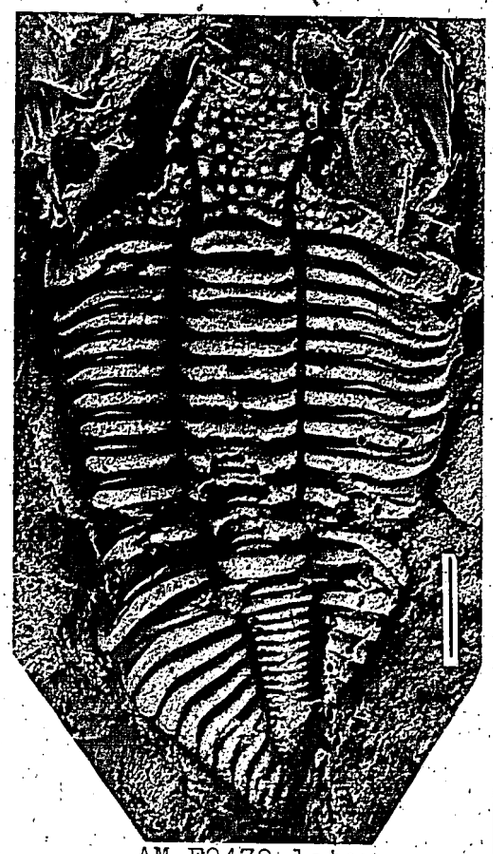
A YASS SYNCLINE – AUSTRALIAN MUSEUM SPECIMENS



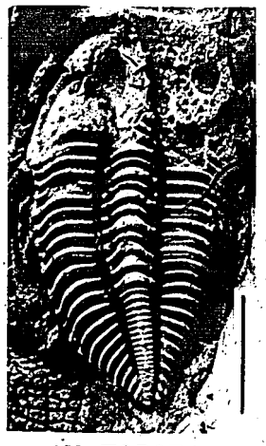
AM F25285A+B
latex replicas



AM F27445 internal mould
(dorsal & oblique views)

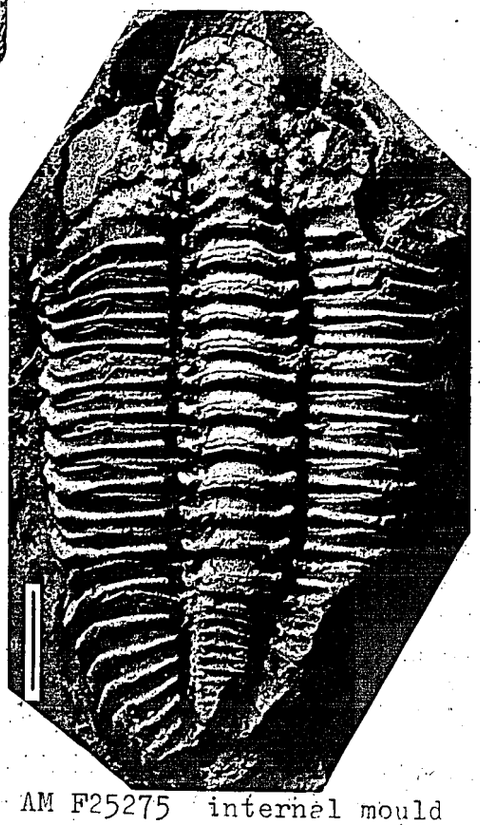


AM F2479 latex
replica

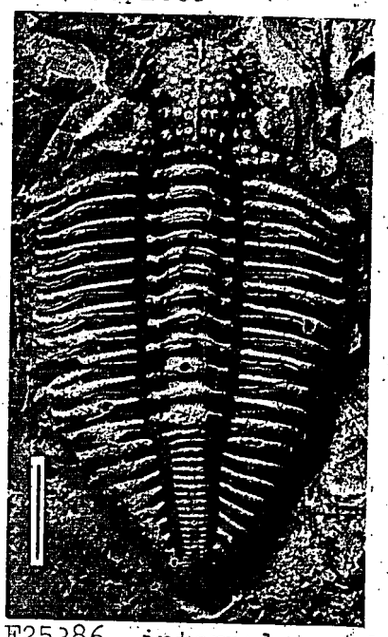


AM F25274
internal mould

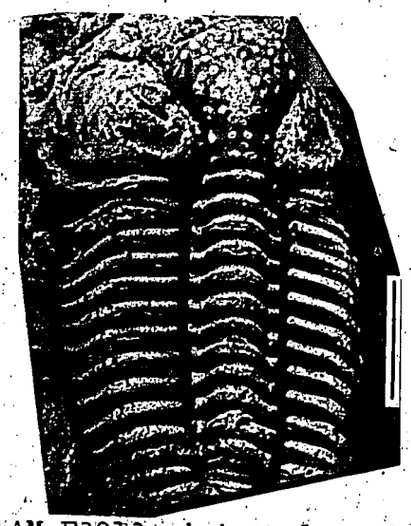
AM F25296
internal mould



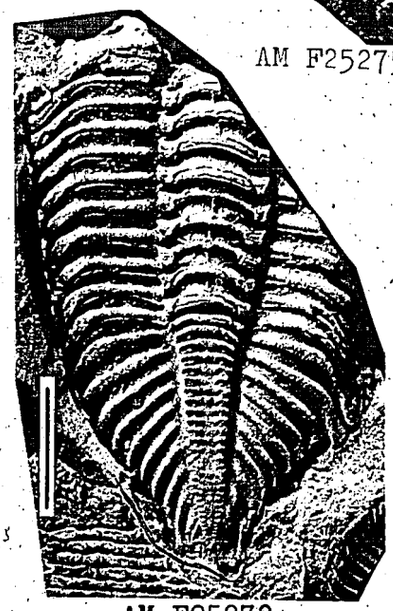
AM F25275 internal mould



AM F25386 internal mould



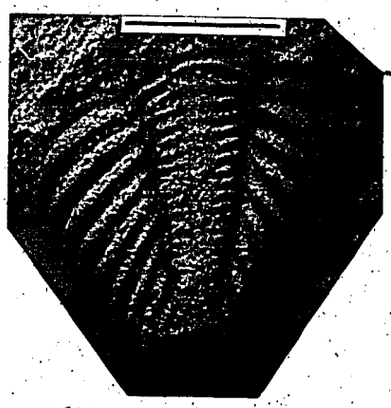
AM F3213 internal mould



AM F25272
internal mould

AM F27466
juvenile

B LYELL HIGHWAY, TASMANIA



NMP26115 internal mould

PLATE 9

ENCRINURUS MITCHELLI

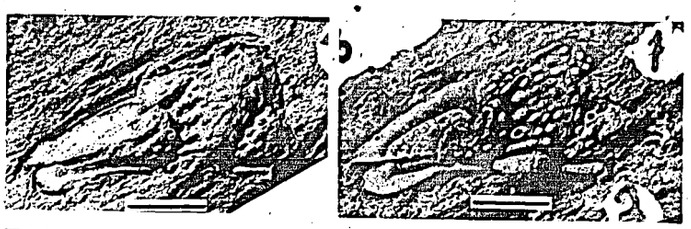
5mm bar gives scale

MATERIAL FROM CANBERRA 1:250 000 SHEET AREA

LOCALITY 7448.0006

F24244
internal mould + latex replica

LOCALITY 7448.0051

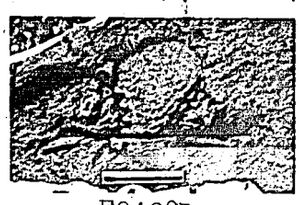


F24278 internal mould + latex replica

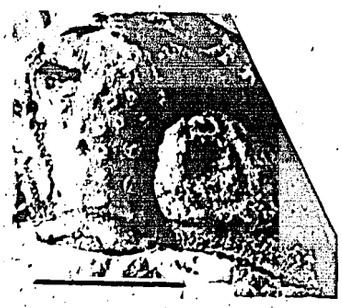
F24277
latex replica

LOCALITY 7448.0052

F24280
latex replica

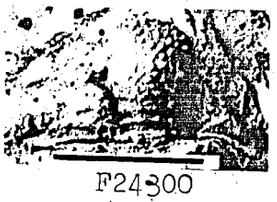


F24281
latex replica

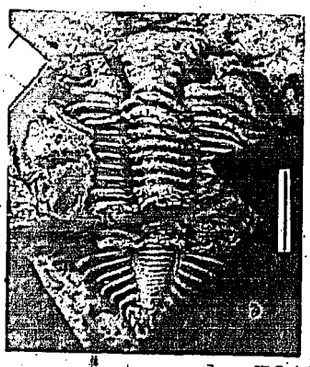


F24298
internal mould

LOCALITY 7448.0057

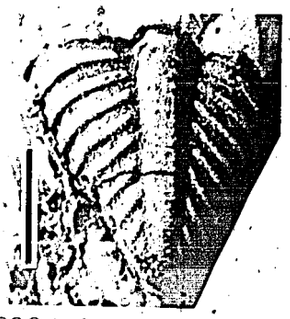


F24300
internal mould



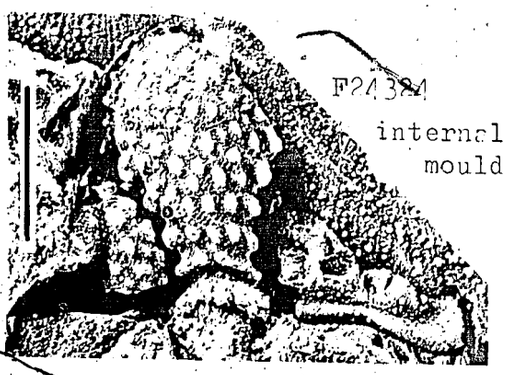
internal mould

F24304 latex replica



F24299 internal mould

LOCALITY 7448.0066



F24324
internal mould

F24311
internal mould

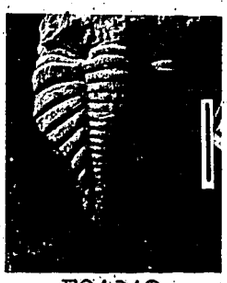
LOCALITY 7448.0072

F24354
internal mould

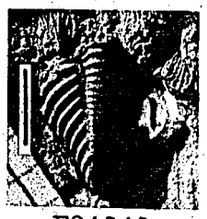
F24333 (top) + 24334
latex replicas

F24336 latex replica + internal mould

F24363 internal mould

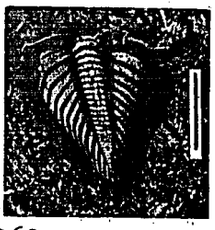


F24340



F24343
internal mould

F24350



F24362
latex replica + internal mould

PLATE 10

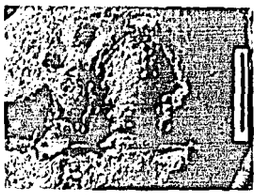
ENCRINURUS MITCHELLI

5mm bar gives scale

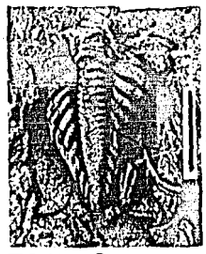
MATERIAL FROM CANBERRA 1:250 000 SHEET AREA

LOCALITY 7448.0085

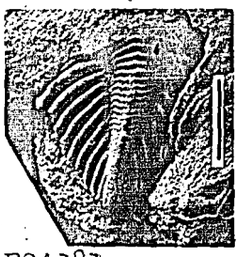
F24384
internal mould



F24389
internal mould



F24378
latex replica



F24381
internal mould

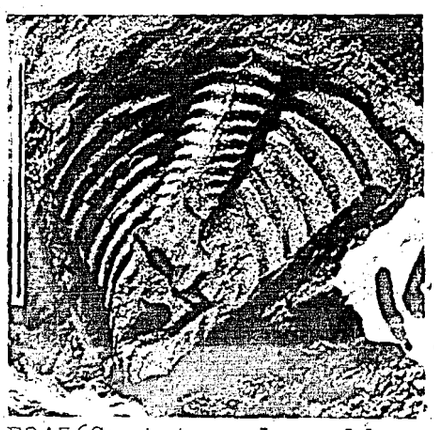
F24383
internal mould

LOCALITY 7448.0086

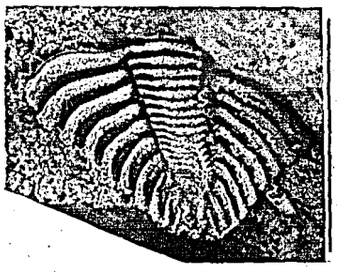
F24394
latex replica

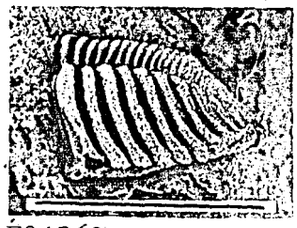
LOCALITY 7448.0104

F24559
internal mould



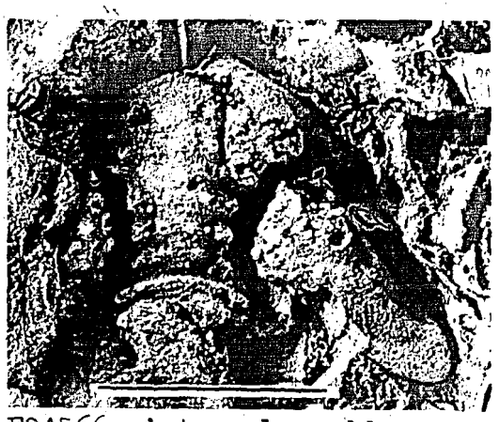
F24560 internal mould



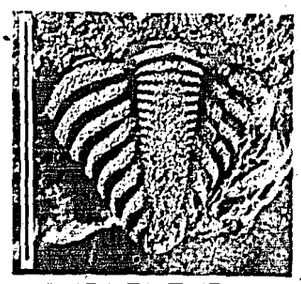


F24562
latex replica

LOCALITY 7448.0123

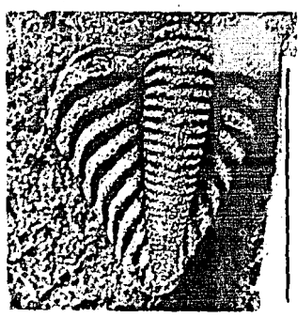


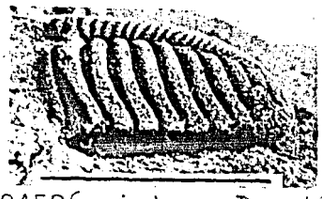
F24566 internal mould



F24574
internal mould

LOCALITY 7448.0171





F24596 internal mould

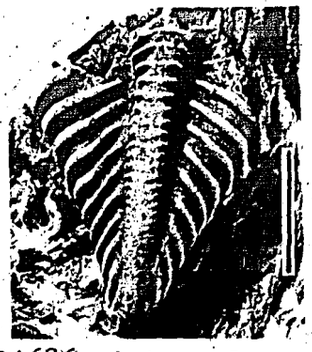
LOCALITY 7448.0174

F24605 latex replica

LOCALITY 7448.0234

F24685 internal mould

LOCALITY 7448.0240



F24686 internal mould

PLATE 11

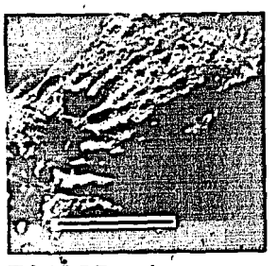
5mm bar gives scale

ENCRINURUS sp. cf. *MITCHELLI* FROM CANBERRA 1:250 000 SHEET AREA

LOCALITY 7448.0013

F24251
internal mould

LOCALITY 7448.0020

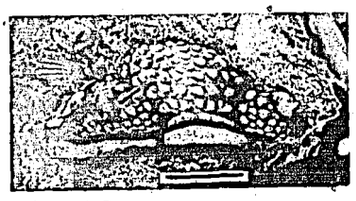


F24257
internal mould

LOCALITY 7448.0052

F24285
latex replica

LOCALITY 7448.0066



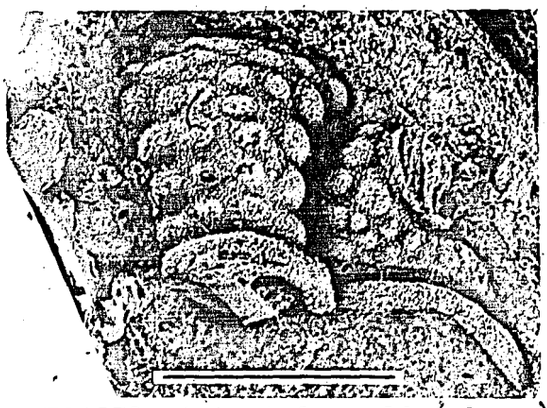
F24327
latex replica

LOCALITY 7448.0072

F24347

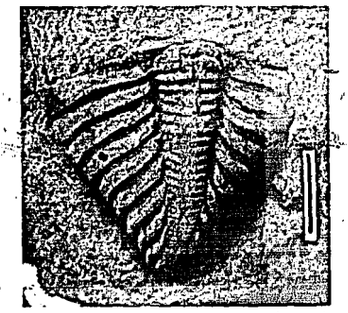
LOCALITY 7448.0123

F24564 internal mould



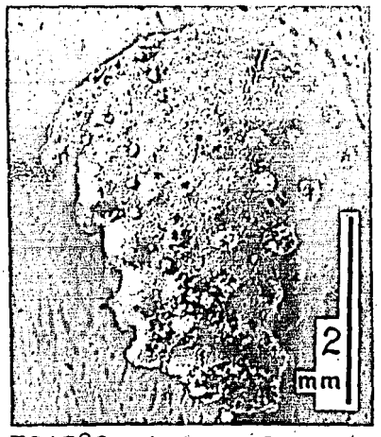
F24570 internal mould (above)
+ latex replica (below)

LOCALITY 7448.0083



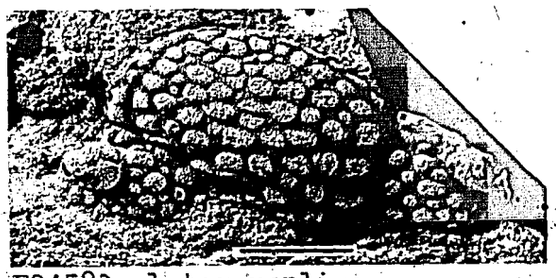
F24374
internal mould

LOCALITY 7448.0146



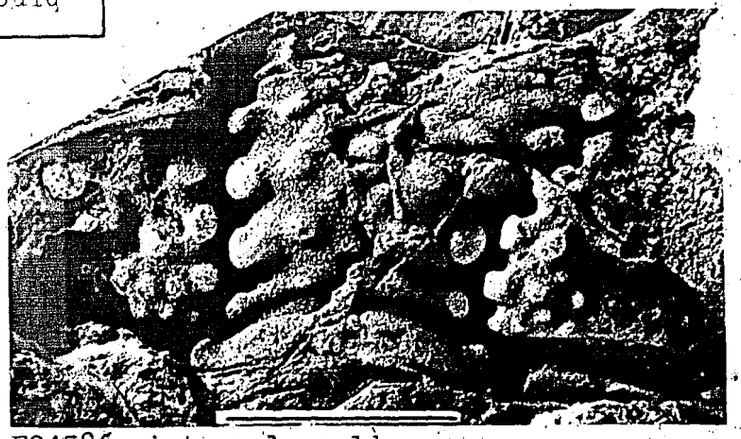
F24582 internal mould

LOCALITY 7448.0156



F24583 latex replica

LOCALITY 7448.0161



F24586 internal mould

PLATE 12

ENCRINURUS MITCHELLI

MOLONGLO RIVER WEST OF CANBERRA - CRANIDIA, etc.

5mm bar gives scale

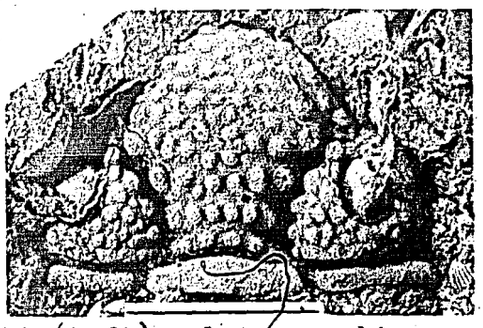
A LOCALITY 7448.0101

F24420 internal mould

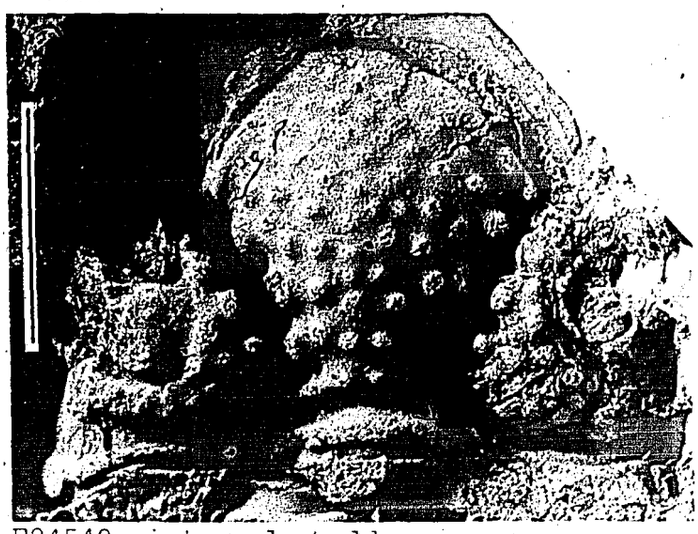
F24420 latex replica

F24443

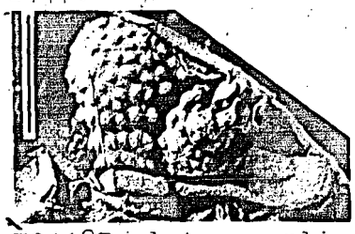
F24474 internal mould



F24476 internal mould (left) + latex replica



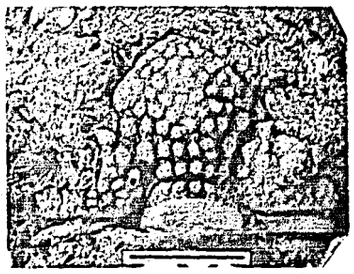
F24542 internal mould



F24487 latex replica

F24529 latex replica

F24535 internal mould



F24540 latex replica

B LOCALITY 7448.0177

F24643 internal mould

F24682 internal mould

F24629 internal mould

F24653 internal mould (left) + latex replica of ventral surface

C LOCALITY 7448.0285

F24699 internal mould

PLATE 13

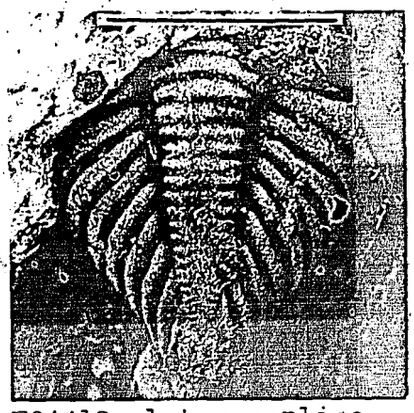
ENCRINURUS MITCHELLI

MOLONGLO RIVER WEST OF CANBERRA - PYGIDIA

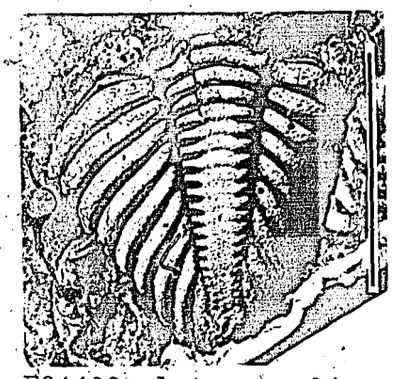
5mm bar gives scale

A LOCALITY 7448.0101

F24418
internal mould

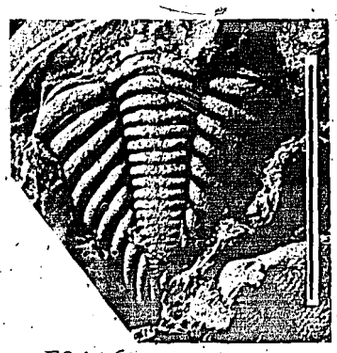


F24419 latex replica

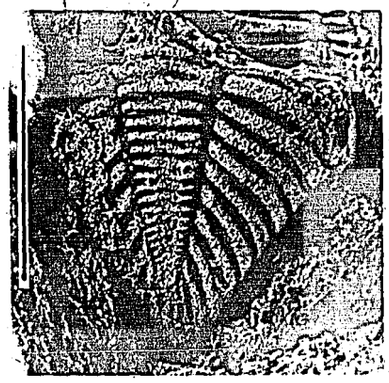


F24432 latex replica

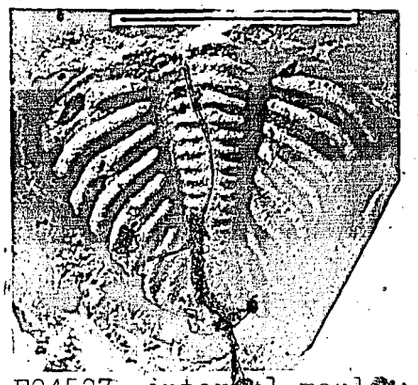
F24440
internal mould



F24465
latex replica



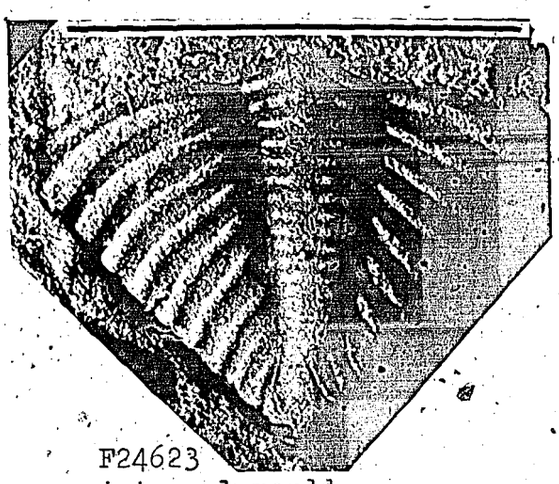
F24524 latex replica



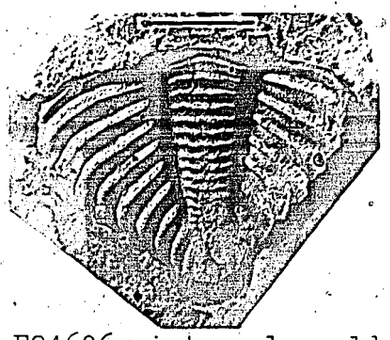
F24527 internal mould

F24534
internal mould

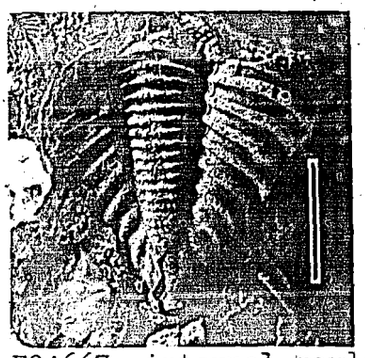
B LOCALITY 7448.0177



F24623
internal mould



F24626 internal mould



F24667 internal mould

C LOCALITY 7448.0285

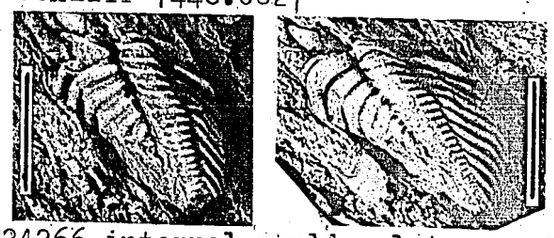
F24701 internal mould

PLATE 14

5mm bar gives scale

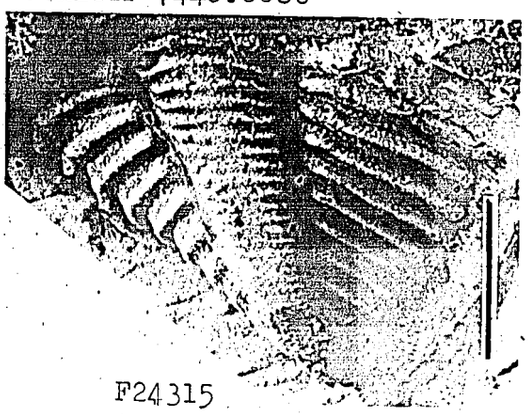
A *ENCRINURUS MITCHELLI ?*, CANBERRA 1:250 000 SHEET AREA

LOCALITY 7448.0027



F24266 internal mould + latex replica

LOCALITY 7448.0066

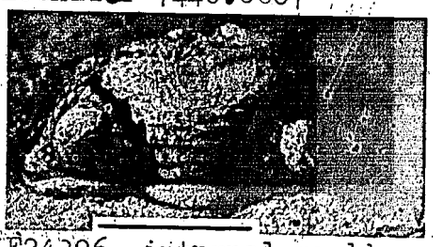


F24315
internal mould

LOCALITY 7448.0086

F24395
latex replica

LOCALITY 7448.0087



F24396 internal mould

LOCALITY 7448.0174

F24612 internal mould

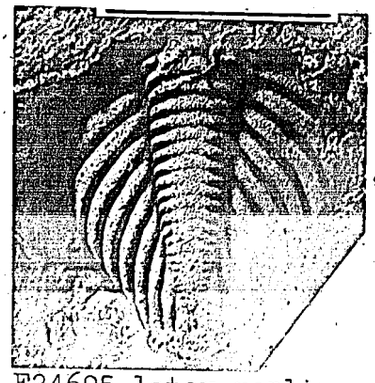
F24611 latex replica

LOCALITY 7448.0177

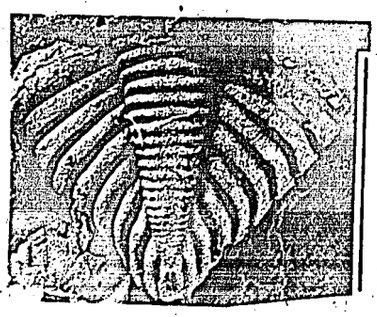
F24671 latex replica

LOCALITY 7448.0285

F24713 internal mould

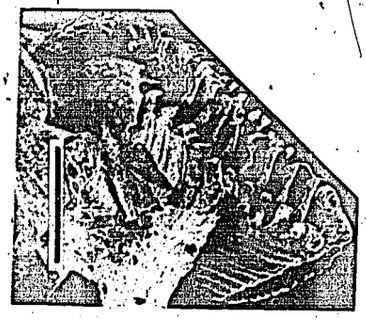


F24695 latex replica

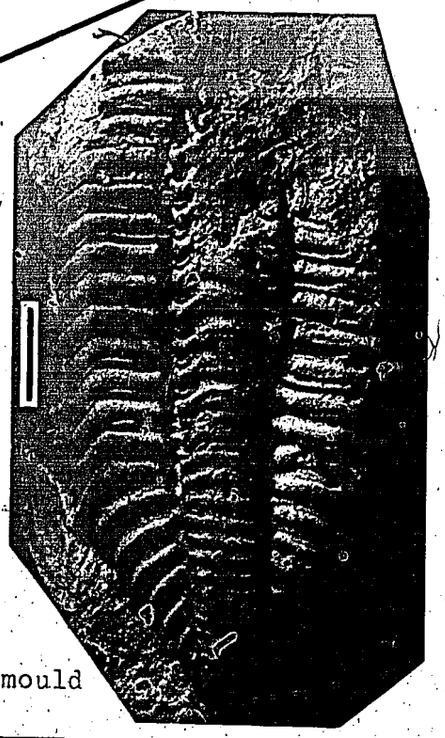


F24697
latex replica

B *ENCRINURUS ROTHWELLAE*, YASS SYNCLINE



AM F25356
internal mould



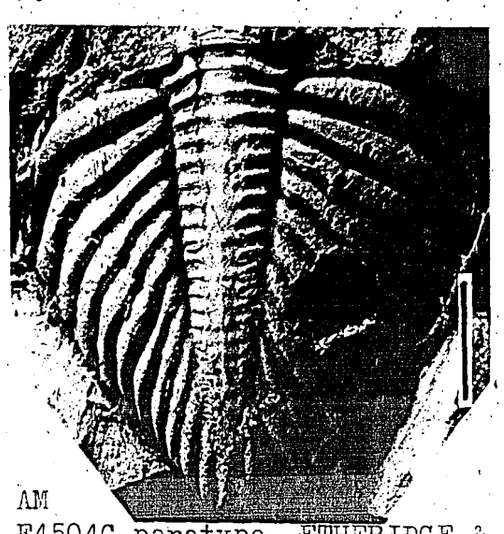
AM F35997
internal mould

PLATE 15

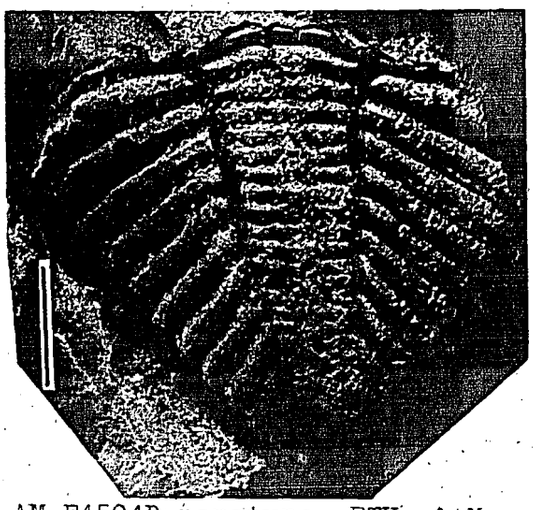
ENCRINURUS ETHERIDGEI

5mm bar gives scale

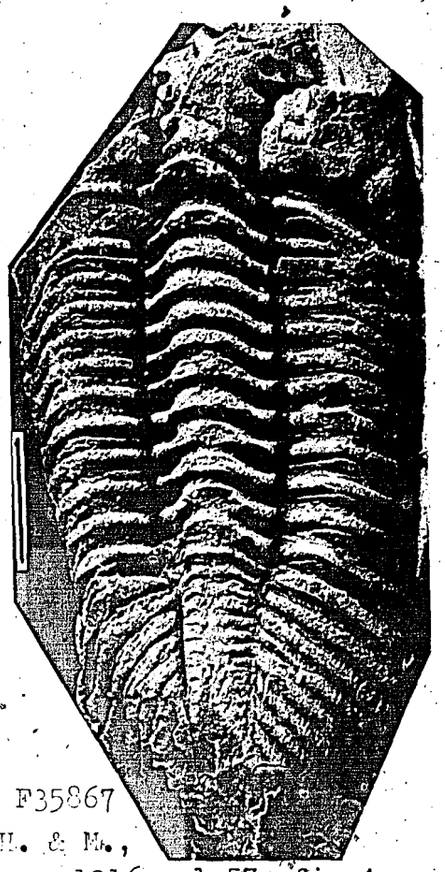
A YARRALUMLA (CANBERRA) - INTERNAL MOULDS



AM F4504C paratype, ETHERIDGE & MITCHELL, 1916, pl.57, fig.2

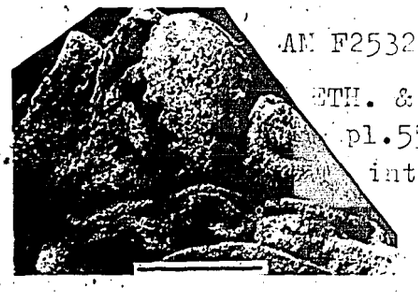


AM F4504D paratype, ETH. & M., 1916, pl.57, fig.8

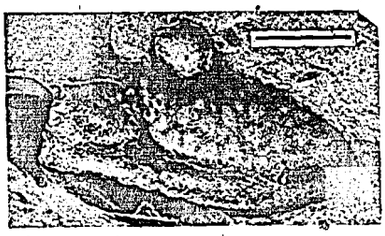


AM F35867 ETH. & M., 1916, pl.57, fig.4

B "GURNETT'S SELECTION", YASS SYNCLINE

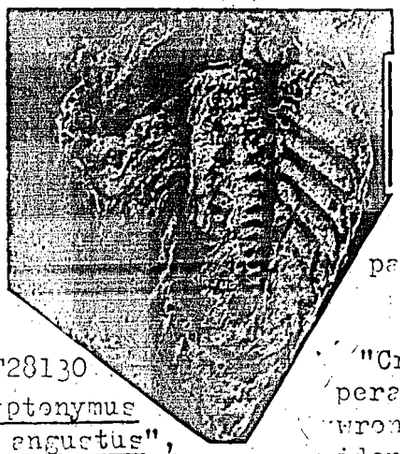


AM F25323 ETH. & M., 1916, pl.55, fig.8; internal mould

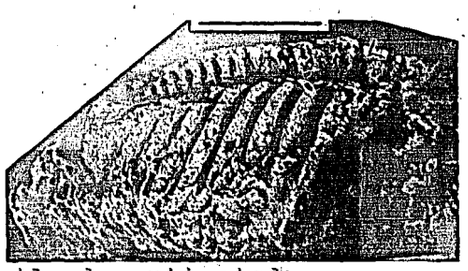


AM F4504

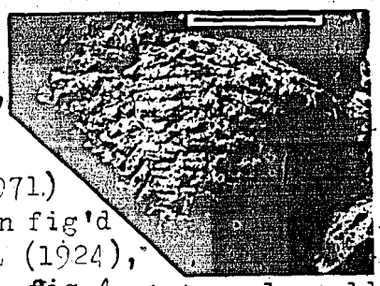
AM F28133 "Cryptonymus angustus", wrongly labelled as specimen fig'd MITCHELL, 1924, pl.10, fig.5; internal mould



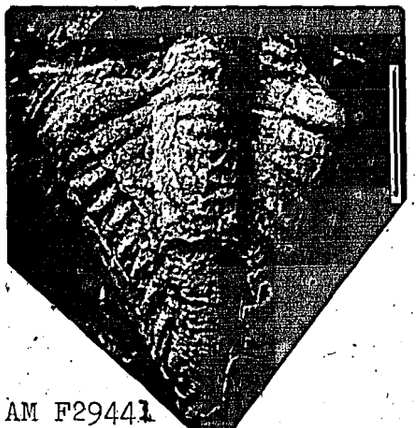
AM F28130 "Cryptonymus angustus", incorrectly identified by FLETCHER (1971) as specimen fig'd MITCHELL (1924), pl.10, figs 5, 6



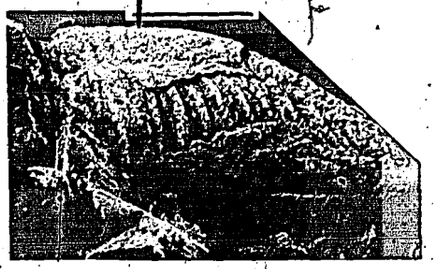
partly decorticated

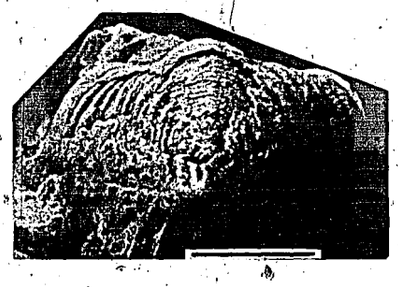


AM F28131 "Cryptonymus perannulatus", wrongly identified by FLETCHER (1971) as specimen fig'd MITCHELL (1924), pl.10, fig.4 internal mould

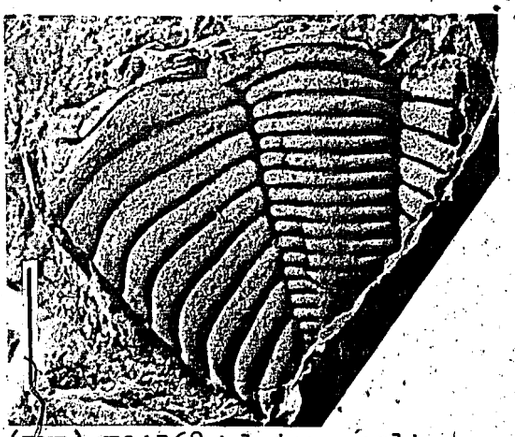


AM F29441 "E. loomesi" ETH. & M., 1916, pl.55, fig.10. partly decorticated





C CANBERRA LOCALITY 7448.0123



(BMR) F24568 latex replica

PLATE 16

5mm bar gives scale

A *ENCRINURUS ETHERIDGEI ?*, CANBERRA 1:250 000 SHEET AREA

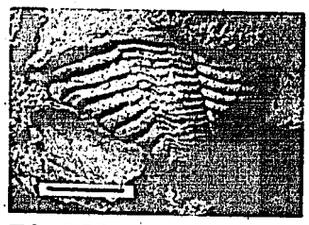
LOCALITY 7448.0022

F24258 latex replica

LOCALITY 7448.0027

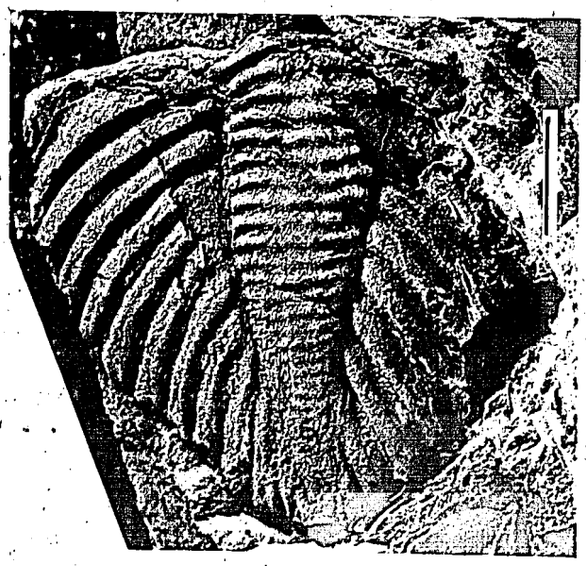
F24265
latex replica

LOCALITY 7448.0047



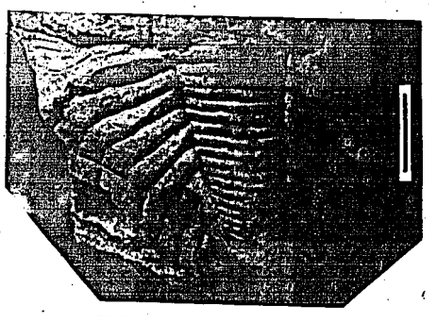
F24271
latex replica

LOCALITY 7448.0123



F24567
internal mould

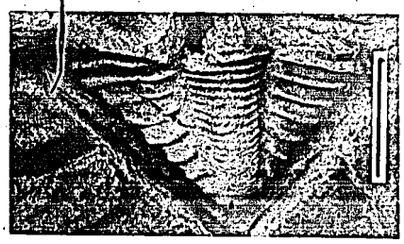
LOCALITY 7448.0170



F24590

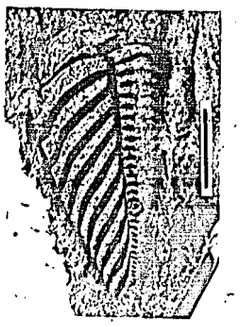
B *ENCRINURUS* sp. cf. *ETHERIDGEI*, CANBERRA 1:250 000 SHEET AREA

LOCALITY 7448.0045



F24268 internal mould

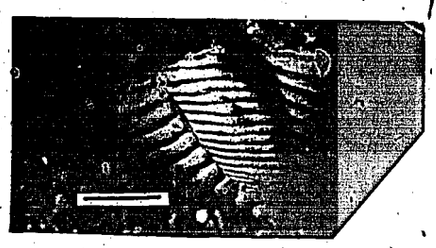
LOCALITY 7448.0066



F24320

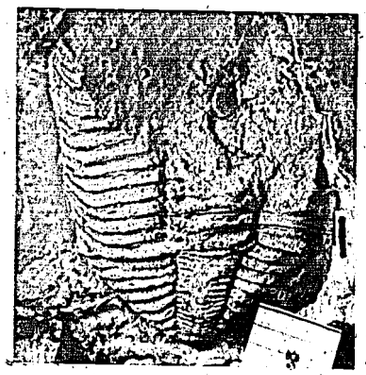
F24321
latex replicas

LOCALITY 7448.0086



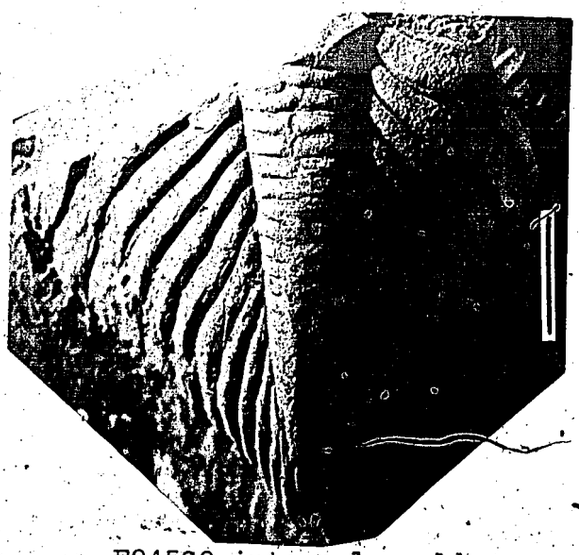
F24392

LOCALITY 7448.0087



F24397
internal mould

LOCALITY 7448.0170



F24592 internal mould

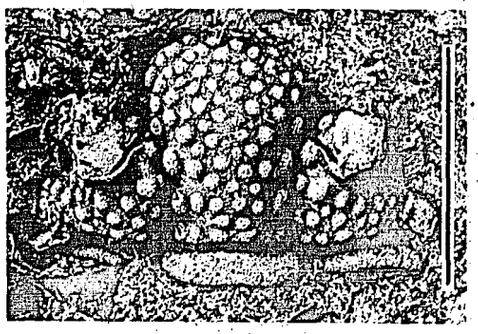
PLATE 17

ENCRINURUS CIVICAE

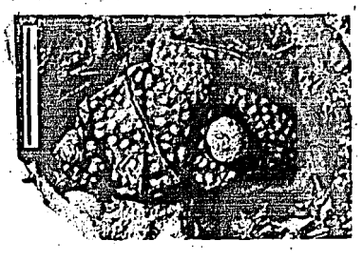
PARATYPE CRAMIDIA

5mm bar gives scale

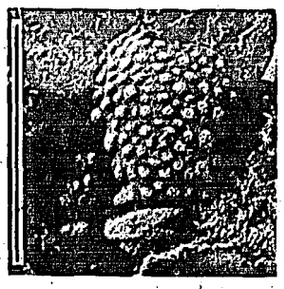
A LOCALITY 7448.0101



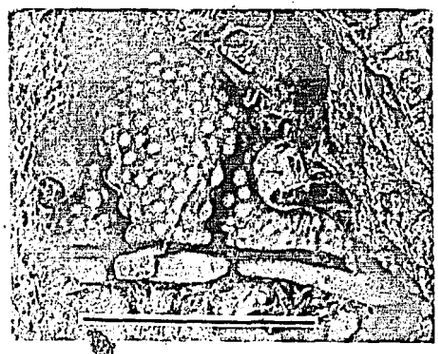
CPC 18470 latex replica



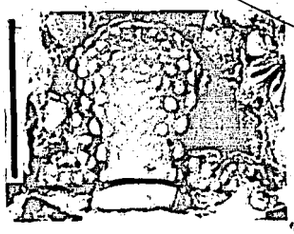
CPC 18496
latex replica



CPC 18497
latex replica

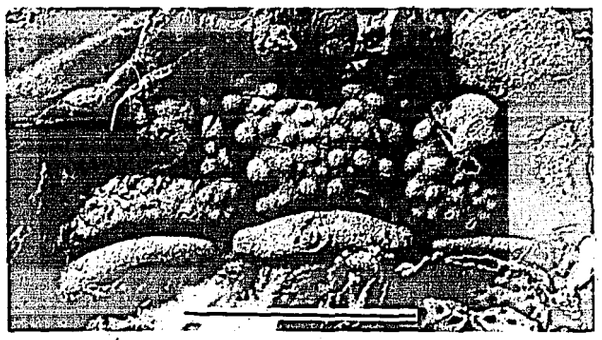


CPC 18499 latex replica

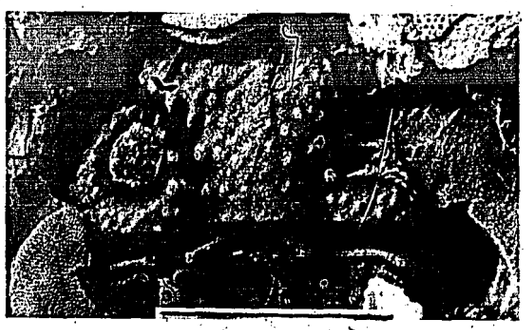


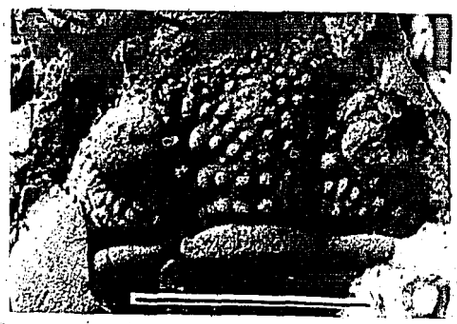
CPC 18516
latex replica

B LOCALITY 7448.0285



CPC 18599 latex replica





CPC 18600 internal mould + latex replica

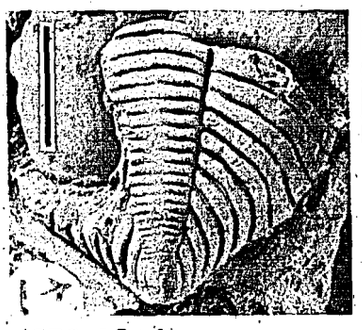
PLATE 18

ENCRINURUS CIVICAE

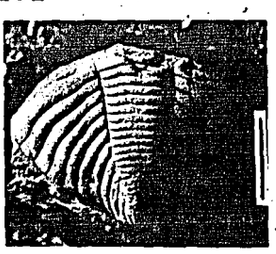
PARATYPE PYGIDIA

5mm bar gives scale

A LOCALITY 7448.0101

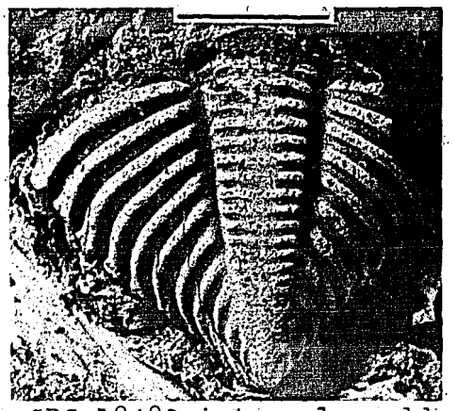


CPC 18465

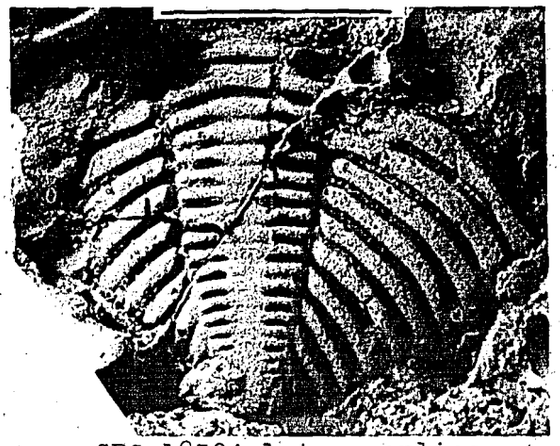


CPC 18476

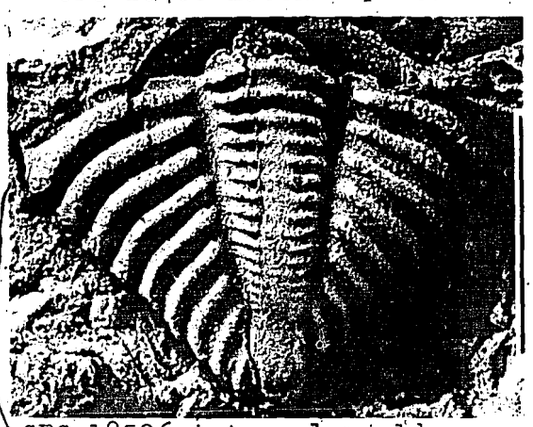
CPC 18480 latex replica



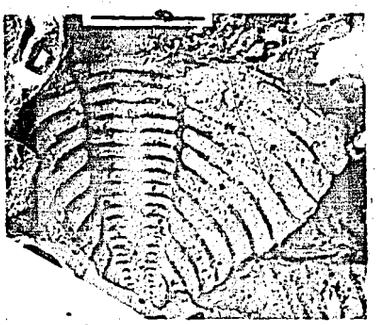
CPC 18483 internal mould



CPC 18504 latex replica



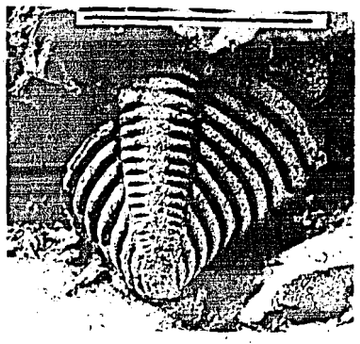
CPC 18506 internal mould

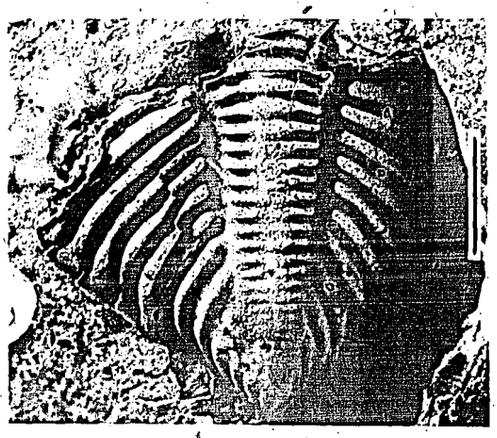


CPC 18517 latex replica

B LOCALITY 7448.0177

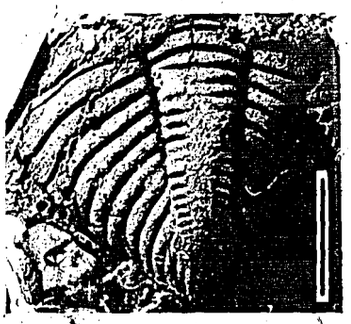
CPC 18589
latex replica



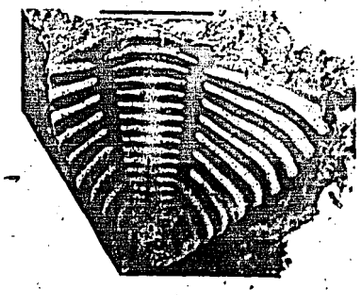


CPC 18592
internal mould

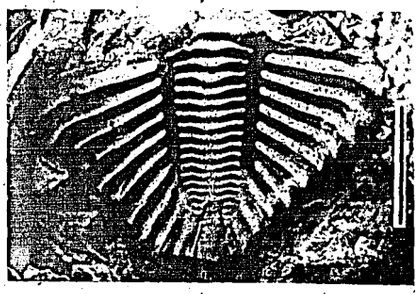
C LOCALITY 7448.0285



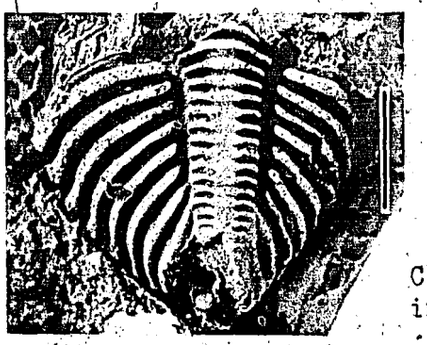
CPC 18602
latex replica



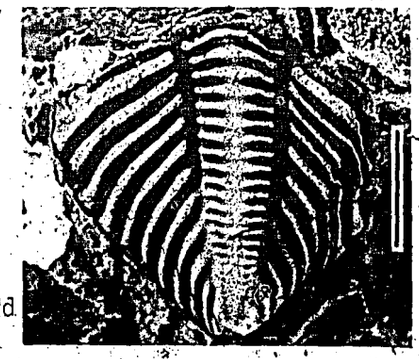
CPC 18607
internal
mould



CPC 18609
internal
mould



CPC 18610
internal mould

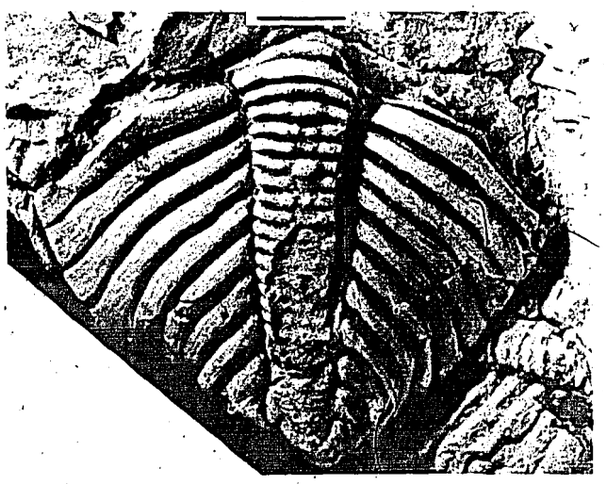


CPC 18611
internal mould

PLATE 19

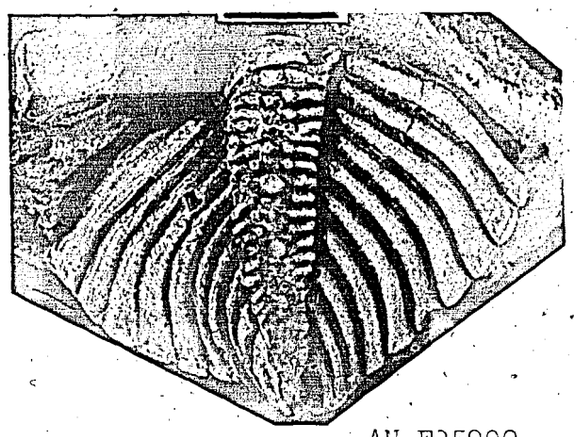
5mm bar gives scale

A *ENCRINURUS SILVERDALENSIS*, YASS SYNCLINE

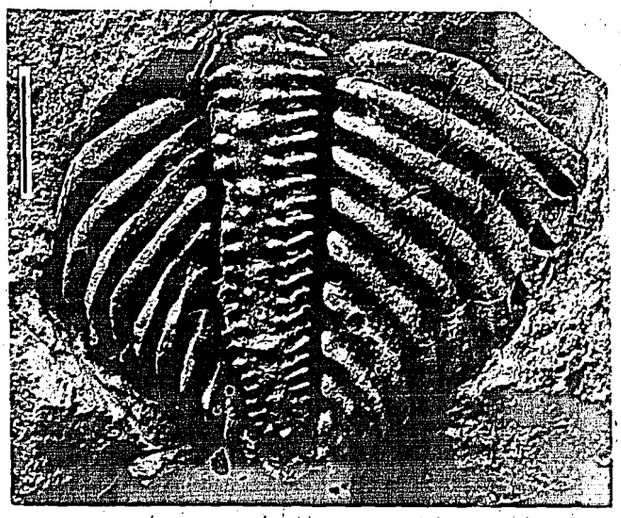


AM F27439A pygidium fig'd ETHERIDGE & MITCHELL 1916, pl.56, fig.5 (part of rachis since lost, and specimen further prepared); paralectotype

AM F27439B
paralectotype



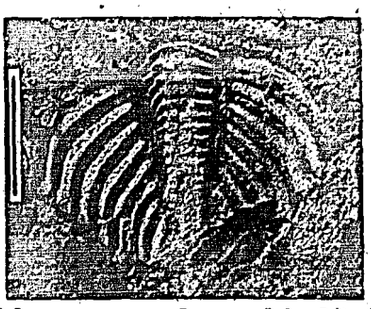
AM F35999
paralectotype



MF498
internal mould

B *ENCRINURUS SILVERDALENSIS* ?, HEAGLEWOOD, TASMANIA

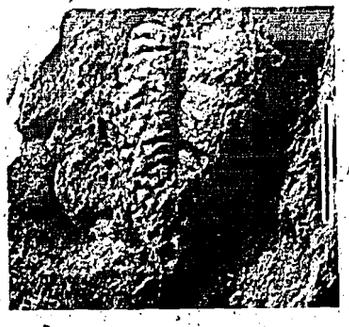
AM F43388B internal mould fig'd ETHERIDGE, 1896, pl.1, fig.7



AM F43388A internal mould fig'd ETH., 1896, pl.1, fig.8

C CANBERRA 1:250 000 SHEET AREA

(BMR) F24262
LOCALITY
7448.0027
E. cf. silverdalensis
latex replica



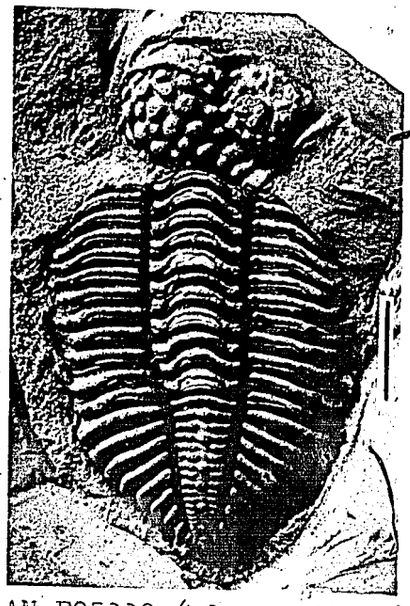
(BMR) F24694
LOCALITY
7448.0273
E. silverdalensis?

PLATE 20

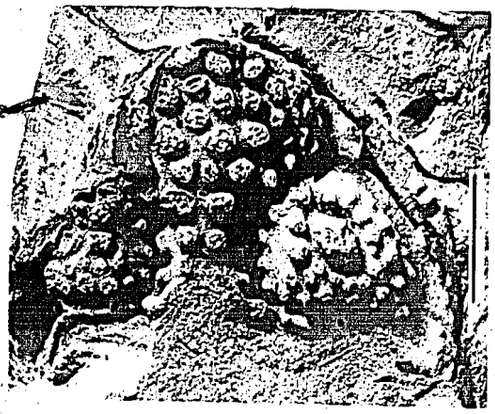
RATOCARA BOWNINGI

SPECIMENS FIGURED ETHERIDGE & MITCHELL, 1916

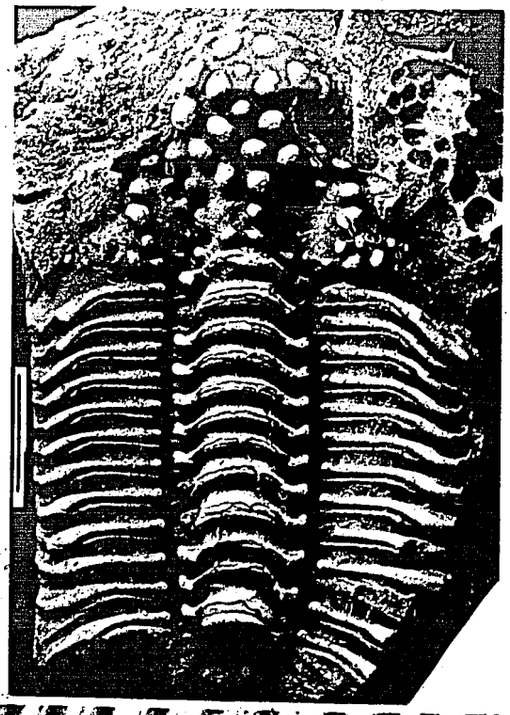
5mm bar gives scale



AM F25332 (pl.55, fig.5)
internal mould



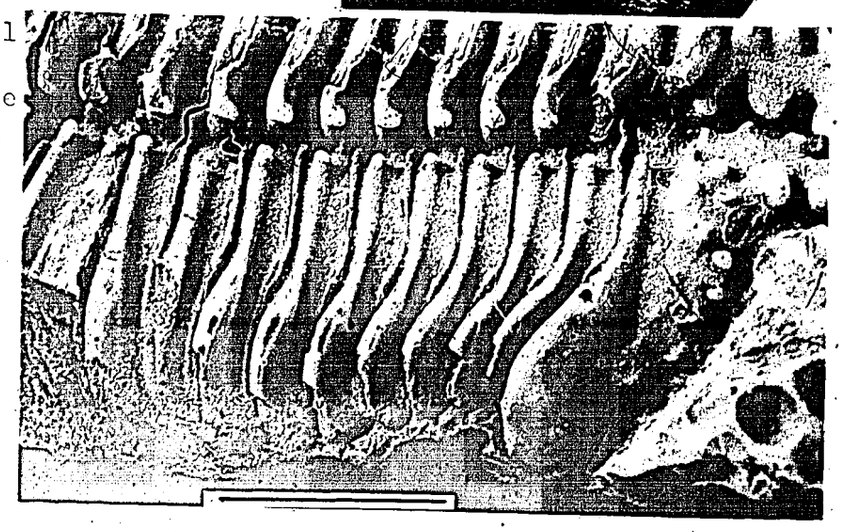
AM F25333 (pl.54, fig.7)
internal mould

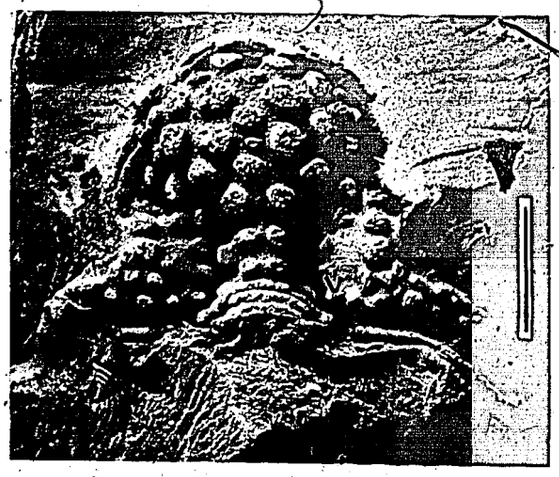


AM F25330
(pl.54, fig.8)
internal mould

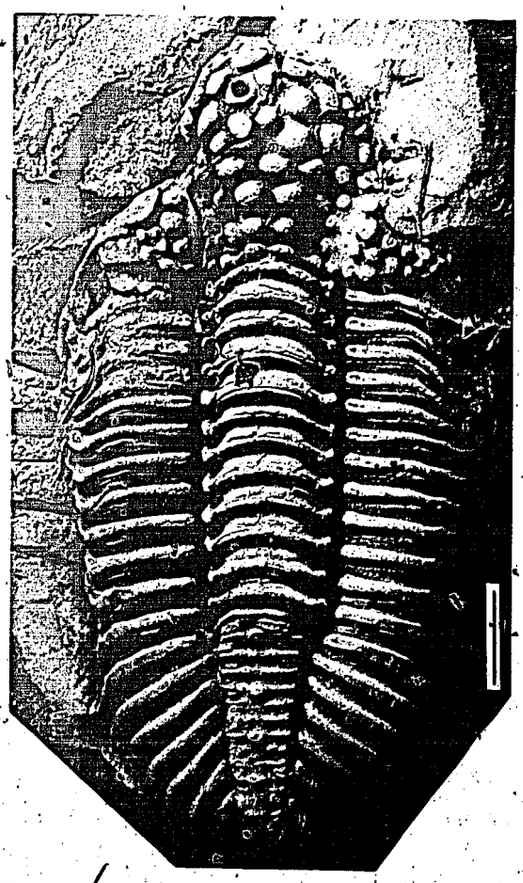
AM F25339
(pl.55, fig.6)

oblique lateral
view to show
ends of pleurae

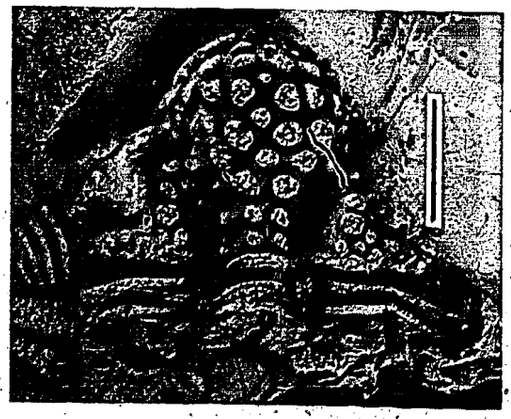




AM F25340
(pl.56, fig.8)
internal mould



AM F25345
(pl.54,
figs 12,14)
internal mould

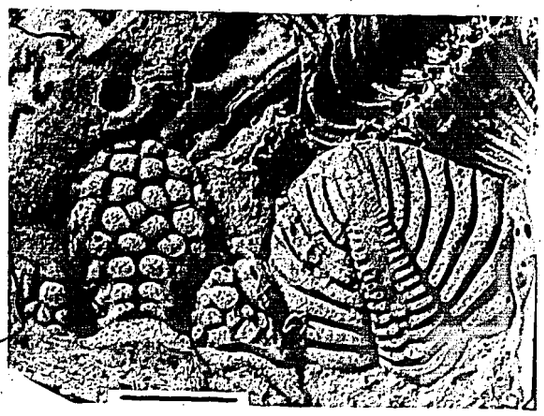


AM F24341
(pl.54, fig.9)
internal mould

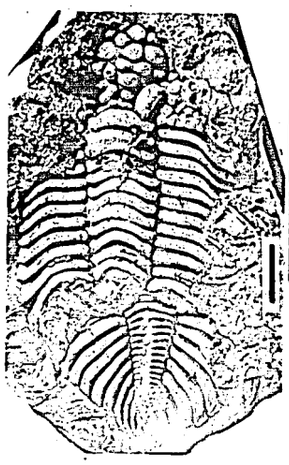
PLATE 21

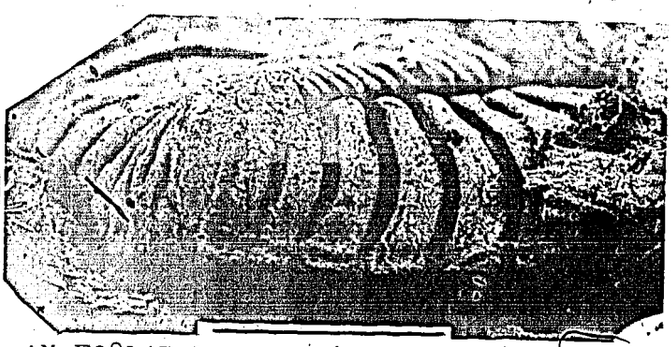
BATOCARA BOWNINGI

5mm bar gives scale

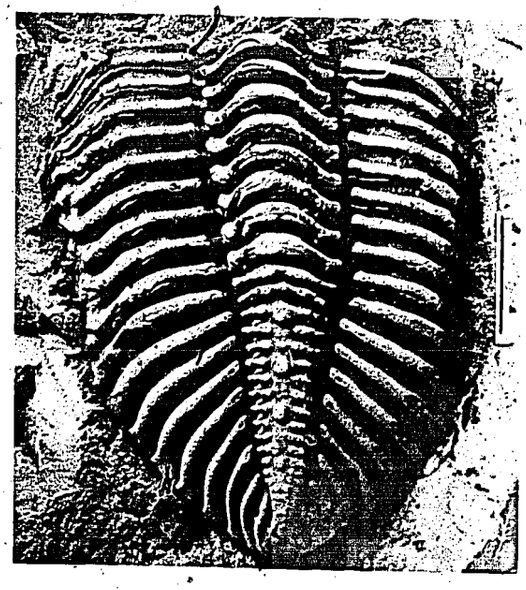


AM F27500 latex replicas

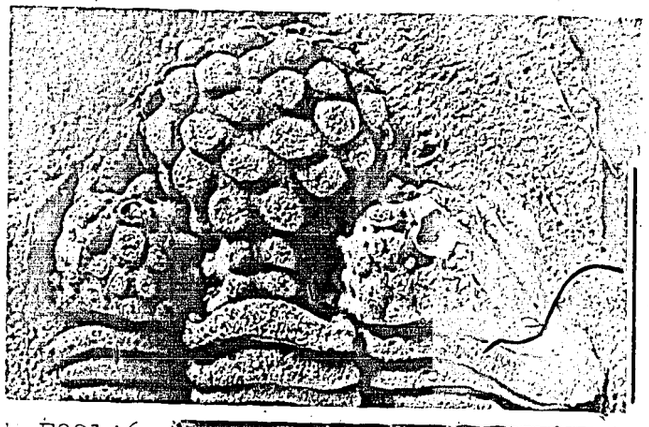




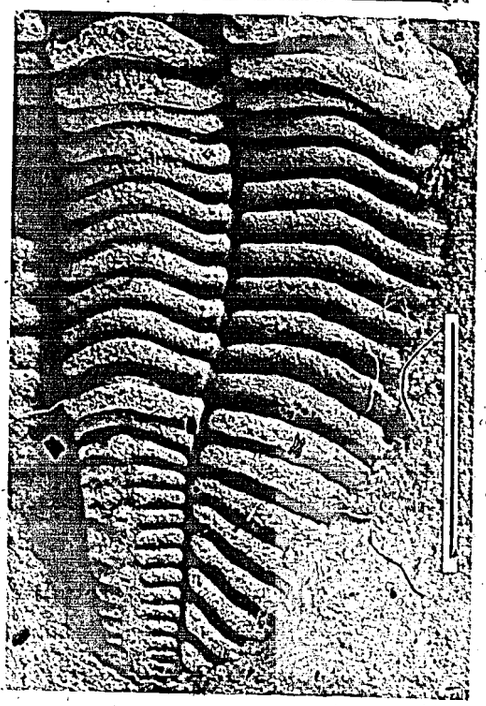
AM F28147 latex replica; oblique rear view shows ribs overhanging margin

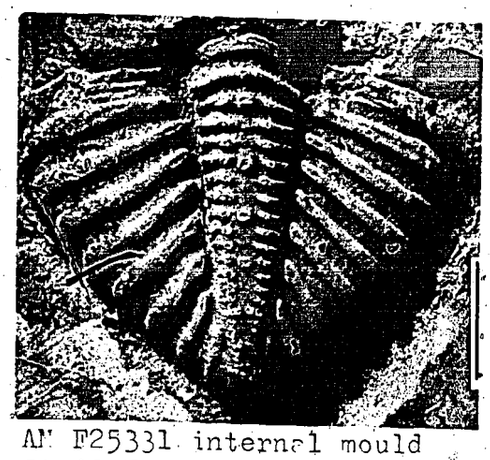


AM F29[illegible]
internal mould
mould

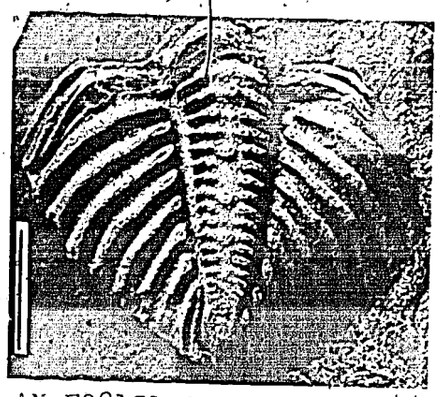


AM F29146
latex replica
(note pores)
AM F29161
internal mould

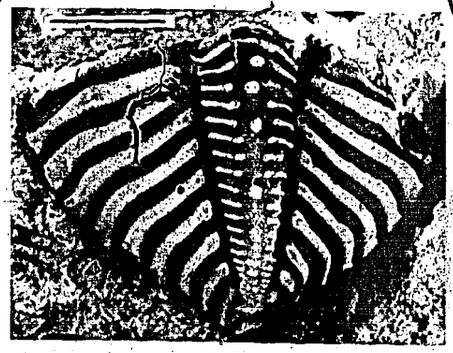


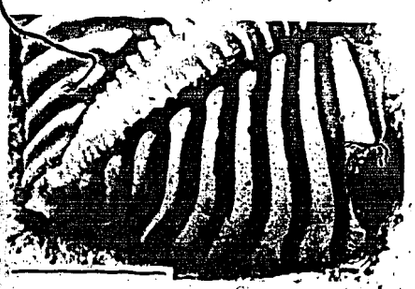


AM F25331 internal mould
fig'd ETHERIDGE & MITCHELL, 1916, pl.54, fig.10

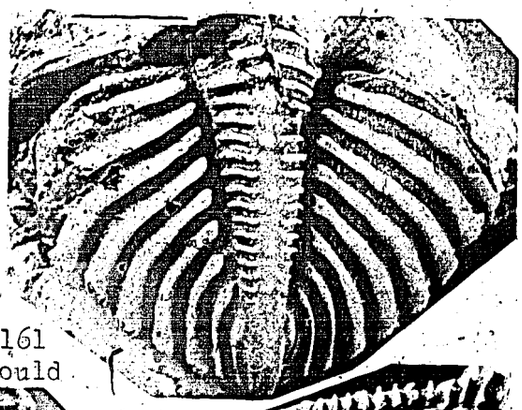
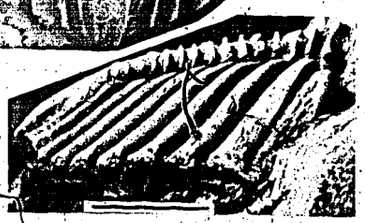


AM F28151 internal mould





AM F29160 internal mould; oblique view shows pleural 'pores'



AM F29161
internal mould