A NOTE ON PSEUDOPUZOSIA SP. FROM SÄRDAL

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At Särdal a well preserved specimen of *Pseudopuzosia* Spath, 1926 was found in a loose boulder of phosphatised rock.

The wholly septate internal cast has a maximum diameter of 101 mm and the following proportions:

	Height	Width	Umbilicus
At 101 mm	45 mm	c. 43 mm	26 mm
At 70 –	33 –	c. 32 –	19 –

The whorl section is slightly compressed and laterally flattened. The umbilical wall is rather steep on the inner whorls, but becomes evenly rounded towards the end of the last whorl preserved.



Fig. 10. Pseudopuzosia sp. External sutures. The complete one at a whorl height of about 27 mm. \times 2.

Plate 12

Fig. 1. *Pseudopuzosia* sp. MMH 12836. A: Lateral view. B: Ventral view; X 1. The specimen is coated with ammonium chloride.

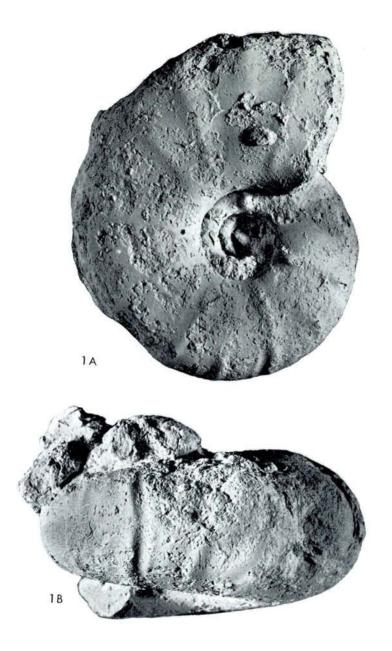
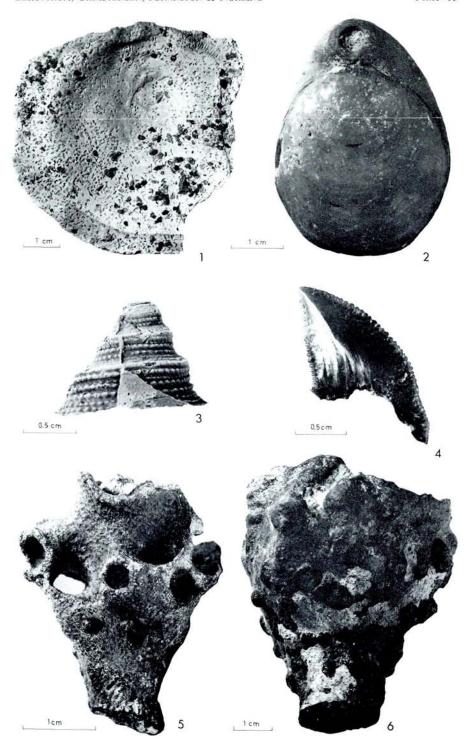


Plate 13

- Fig. 1. Ostrea marklini Lundgren, LO 4446t. Santonian calcareous sandstone, Särdal. Coll. Östen Rinaldo.
- Fig. 2. Neoliothyrina? sp., LO 4447t. Cenomanian (?), Särdal. Coll. Ernst Wennerholm.
- Fig. 3. *Trochus*? sp., LO 4448t. Cenomanian (?) phosphatised limestone, Särdal. Coll. Ernst Wennerholm. The specimen is coated with ammonium chloride.
- Fig. 4. Squalicorax lindstroemi (Davis), LO 4449t. Santonian calcareous sandstone, Särdal. Coll. Christer Johansson & Jan Bergström.
- Fig. 5. *Plocoscyphia* sp., LO 4450t. Cenomanian (?) phosphatised limestone. Coll. Ernst Wennerholm.
- Fig. 6. Myliusia sp., LO 4451t. Cenomanian (?) phosphatised limestone. Coll. Ernst Wennerholm.



The cast shows feeble, slightly curved constrictions, about 8 per whorl, and posterior to each of these a weak, rounded rib with an umbilical node. The constrictions, ribs and nodes are very distinct except on the last half-whorl preserved, where these characters are gradually weakened (pl. 12). The suture is pachydiscid, but only moderately incised (fig. 10).

Affinities. The specimen was compared with material of *Pseudopuzosia marlowense* (Noble, 1911), in the collections of the British Museum (N.H.) and Institute of Geological Sciences, London, which was restudied by Matsumoto (1954). (These specimens are: BM No. 48764, figured by Matsumoto 1954, fig. 6; GSM 108896; and the holotype GSM 25456, figured by Noble 1911, fig. 1, and by Matsumoto 1954, fig. 5).

These three specimens show only the inner septate whorls to a diameter of 52 mm, and it is difficult, therefore, to compare them in detail with the specimen from Särdal. The specimens are very similar in respect of the constrictions and the ribs posterior to these, which are of the same shape, strength and number as in the specimen from Särdal. The umbilical tubercles are poorly preserved in all the English specimens, but seem to be more bullate than in the specimen here described. Also the suture lines are very similar. However, all the English specimens differ in being depressed and in having more evenly rounded whorl sections. The specimen from Särdal is probably closely allied to *P. marlowense*, but not conspecific with it.

Stratigraphy. Belemnites from the phosphatised rock indicate Cenomanian and ?Turonian ages. The only species so far referred with certainty to the genus *Pseudopuzosia* is the above mentioned rare English *P. marlowense* of Upper Turonian age (*Holaster planus* Zone). A similar age may be suggested for the specimen here described.

Acknowledgements. Thanks are due to Professor T. Matsumoto, Kyushu, for discussion of the specimen and to Dr. M. K. Howard, British Museum (N.H.) and Mr. C. J. Wood, Institute of Geological Sciences, for loan of material for comparison.

Table 8. The macrofauna of the derived phosphatised rock fragments at Särdal. The fauna is at least partly of Cenomanian age. Numerals indicate number of specimens, the sign + that the form is present but the number uncertain. Letter headings of columns: a, more or less complete specimens, in the case of brachiopods and bivalves with both shells; b, pedicle valves of brachiopods, left valves of bivalves, and spines of echinoderms; c, brachial valves of brachiopods and right valves of bivalves; d, vertebrate bone fragments; e, vertebrate teeth.

	ب د د	EPIFAUNA	a p c	NEKTOBENTHOS AND NEKTON	a d e
-		Placascyphia sp.	-		
		Cribrospongia? sp.			
		ventriculités sp.			
		Myliusia sp.	7		
		Rhizopoterion? sp.	رم م		
		Hexactinellida indet.(at least four species)	೫		
		"Rhynchonella" aff. spectabilis Lundgren	3 1		
	•	"R." grasiana d'Orbigny?	7		
		Neoliothyrina ciplyensis (v. Hanstein)	22	-	
		Neoliothyring? sp.	-		
		"Rectithyris" visae (Hadding)?	3 1 1		
		Rhynchora? sp.	7		
Barbatia sp.	_	Inoceramus sp.(thick fragments)	+	Pseudopuzosia sp.	_
Crassatella regularis d'Orb? 750		Spondylus sp.	-	Baculites sp.	7
Crassatella sp.	3 1 1	? Pecten cretosus (fragments)	٠	Nautiloid	_
Glycymeris? sp.	-	Pectenidae gen et sp.	- 1:	Actinocamax ex. gr. primus/plenus	_
Lucinidae gen. et sp.	_	Lima sp.	-	Actinocamax? sp. indet.	m
? Panopaea? sp. (fragment)	-	?Exogyra sp.	٠.		
? Unionidae ? gen. et sp.		Requeniidae ? gen. et sp.	5 3	Squalicorax lindstroemi (Davis)	9
Indet, bivalve		Gibbula sp.	_	Isurus cf. mantelli (Agassiz)	-
		Trochus? sp.	7	Isurus zippei (Agassiz)	7
		Gastropoda indet.	Ü	Lamna appendiculata (Agassiz)	2
				Lamna? sp.	ın
		? Ditrupula ? sp.	•	Shark sp. A	-
				Ptychodus mammillaris Agassiz	2
		? Tylocidaris sp.(spines)	•	Chimaerid, jaw fragments	+
		? T. clavigera (König) (spines)	•	? Pycnodus complanatus Agassiz	7
		? Cidaris sp. (spines)	•	Plioplatecarpus? sp.	-
		-		(? Mosasaurian, cf. Table 10)	