

A MONOGRAPH
OF THE
BRITISH JURASSIC GASTEROPODA

BY
WILFRID H. HUDLESTON, M.A., F.R.S., & C.
VICE-PRESIDENT OF THE PALAEOGEOGRAPHICAL SOCIETY

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GASTEROPODA OF THE INFERIOR OOLITE

PLEUROTOMARIIDÆ


PAGES 391-444; PLATES XXXIII-XL

Section 5. - ORNATAE

Shells turritid, trochiform, turbinate or discoidal, with great range as to size; always umbilicate, often largely so. Whorls usually angular and carinated with sutures often canaliculate. The ornamentation is rich, with extensive and varied tuberculation on the carinas. The sinus-band, except in *Pl.ornata*, Sow., is very wide, nearly median, flat or rarely projecting, and in the later whorls without much spiral striation.


<i>Pleurotomaria</i>	<i>paucistriata</i> , d'Orbigny		<i>Proteus-group</i>	
	<i>proteus</i> , Desl. ●			
	<i>armata</i> , Münster ●			
	cf. <i>sauzeana</i> , d'Orbigny			
<i>Pleurotomaria</i>	<i>tuberculosa</i> , DeFrance ●		<i>Ornata-group</i>	
	<i>ornata</i> , Sowerby			
	<i>ornata-depressa</i> , sp. nov.			
	<i>actaea</i> , d'Orbigny			
	<i>oxytera</i> , sp. nov.			
	<i>baugieri</i> , d'Orbigny			
	<i>actinophala</i> , Deslongchamps ●			
	<i>mopsa</i> , d'Orbigny			
	<i>mirabilis</i> , Deslong. (micromorphic variety)			

Sub-section. - Shells turritid, attaining a great size, umbilicus small or nil. Whorls subtabulate with rich sculpture, and often much tuberculate ornament on the carinae.

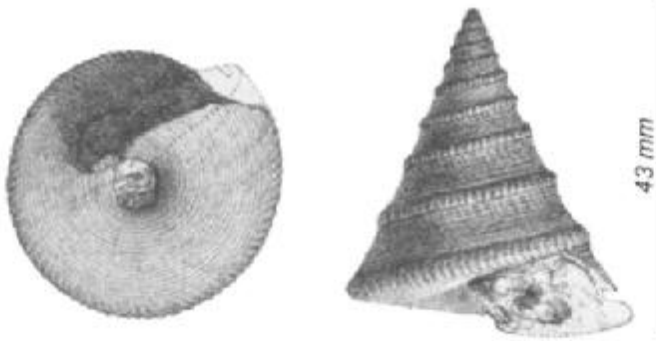
<i>Pleurotomaria</i>	<i>subaraneosa</i> , sp. nov. ●	
	cf. <i>araneosa</i> , Deslongchamps	

Section 6. – GRANULATAE

Shells trochiform, mostly inclined to be depressed, generally rather small, more or less umbilicate. Whorls sloping, flat or subangular; body-whorl relatively large, and usually with a very convex base. Ornaments for the most part deeply incised, so that cross-hatching produces a granular appearance. Sinus-band anterior, narrow and prominent, frequently constituting a keel.

<i>Pleurotomaria</i>	<i>yeovilensis</i> , Tawney	
	var. <i>rugosior</i>	
	<i>granulata</i> , Sowerby	
	<i>phylax</i> , sp. nov.	
	<i>plicopunctata</i> , Deslongchamps	
	<i>palaemon</i> , d'Orbigny ●	
	<i>trapeza</i> , sp. nov.	

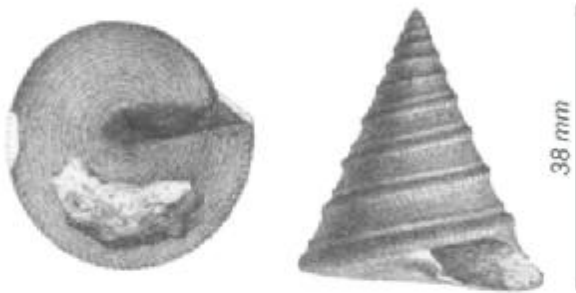
In the above, *Pl.granulata*, *plicopunctata*, and *palaemon* constitute the *granulata*-group proper, which, be it remembered, was united with the *mutabilis*-group by Deslongchamps to form one section. Hence, according to the classification of that author, the Conicae and the Granulatae, as defined above, should for the most part be united. This constitutes the principal difference between the arrangement now adopted and the divisions in the "Memoire sur les Pleurotomaires".



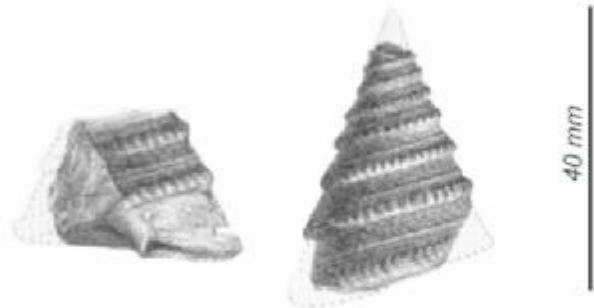
Pl. elongata, Sow., var. near to *Pl. conoidea*, Deshayes
Louse Hill (Humphriesianus-zone)



Pl. elongata, Sowerby, the type-form
cf. *Pl. pictaviensis*, d'Orb.
Sauzei-bed
Neighbourhood of Sherborne (Combe)



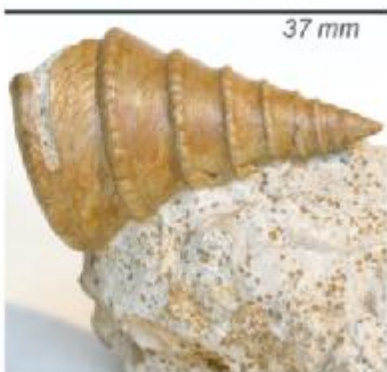
Pl. elongata, Sow., another variety
Concavus-bed, Bradford Abbas



Pl. elongata, Sow., var. *turrita*, Desl.
Parkinsoni-zone, Burton Bradstock



Pl. elongata, Sow., var. *angusta*
Bradford Abbas, ? Murchisonae-zone



Cf. *Pl. elongata* var. *turrita*, Bajocium, Normandy

Pleurotomaria yeovilensis

1873, Tawney

Concavus-bed

? Sauzei-bed

1873 *Pleurotomaria yeovilensis*, Tawney

Dundry Gasteropoda, p.52 (44), pl.iii, fig.4

380. Hudleston

Bibliography, &c. – *Pl. yeovilensis* was described by Tawney at a time when good specimens were rare. The locality "Yeovil" was given because so many of the Bradford Abbas fossils in those days were supplied to collections and museums by "fossil-men" who resided at Yeovil, the nearest town to Bradford Abbas.

The species is one of remarkable beauty, and interesting as the representative of the *Granulatae* in the Lower Division of the Inferior Oolite. *Pl. alcibiades* is possibly a more depressed and less ornamented form; this, too, in France most likely occurs on a low horizon, not being noted from the "Oolithe ferrugineuse".

<i>Description:</i>	Height	17 mm
	Basal diameter	30 mm
	Spiral angle	105°

Shell conical-depressed, deeply umbilicate. Spire regular and sharp, with a slightly flattened apex. Whorls (seven) subangular and sloping; suture sub-canalliculate. The whorls exhibit fine reticulate ornaments, having the tendency to become granulate; whilst in the two last whorls an elegant tuberculate corona is developed on the posterior ridge, the tubercles radiating away from the centre.

The sinus-band is very salient, being situated at the anterior angle in the whorls of the spire; it has granulated spiral lines to the number of three. The body-whorl is relatively very large, and, in addition to the posterior corona and the prominence of the sinus-band, exhibits a thick tuberculated belt at the periphery; these tuberculations are drawn out radially, and correspond to the tuberculations of the corona. The base is subconvex, being excavated by a deep marginal furrow, from which it rises towards the edge of the umbilicus; throughout the base spiral lines are decussated by bold sinuous radii, which die out before reaching the marginal furrow. The umbilicus is steep and smooth, and so deep as to expose the internal coils. Aperture oval, depressed.

Var. *rugosior*. - Of somewhat larger habit than the preceding. The spiral angle is scarcely 90°; consequently the sides of the shell are steeper, whilst the ornaments are coarser, especially throughout the base; the umbilicus, too, is narrower, but equally steep and penetrating.

Relations and Distribution. - Although *Pl. yeovilensis* possesses considerable general resemblance to *Pl. baugieri*, especially in its basal aspect, the very different character of the sinus-band forbids them being placed even in the same section. It is not impossible, however, that the *Ornatae* and the *Granulatae* may, to a certain extent, approach each other in these two species.

Practically, then, as a member of the *Granulatae*, *Pl. yeovilensis* stands alone in the *Concavus*-bed of Bradford Abbas, where excellent specimens are by no means rare. If we desire to see the change wrought through lapse of time we have a remarkable instance in the var. *rugosior*, which represents this species on the next horizon, viz. the *Sauzei*-bed of Osborne. Specimens from Beaminster and Dundry are rare, and not very satisfactory. There is one specimen in my Collection from Bradford Abbas, which in its depressed spire and soft ornamentation might almost pass for *Pl. alcibiades*.



Pl. yeovilensis, Tawney,
Concavus-bed, Bradford Abbas

Pl. yeovilensis, Tawney, var. *rugosior*,
Sauzei-bed, Osborne

