

Book\_T34.1-2 F\_Epe Renggeri marl  
*Golmerula gordialis*



SIN\_Cp7 125 (Singapore / Changi beach, car park 7)



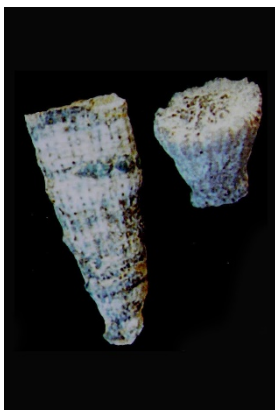
Book\_T31.2-6 D\_Ku lamberti-Sz.  
*Trochocyathus magnevillianus* (?)



SIN\_Cp7 109 (Singapore / Changi beach, car park 7)

## Beach findings – usefull informations for fossils ?

Solitary corals, living on the floor, are rare, whether as fossils or to-day. Remarks see next picture below.



Book\_T31.1-7 u. 8  
F\_EtD scarburgense  
-Sz. Eternoz/F



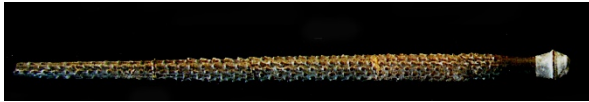
SIN\_CP7 BEACH  
SINGAPORE



MAL\_PP 023.1 MALAYSIA

As one assumes the Renggeri marl was a muddy substrate, the existence of a sessile coral for a long time was a mystery for me and my view for clams, living in the mud, was obviously blocked. Clams are filtering the water so the sea floor can not have been live threatening (lack of oxygen). Nevertheless fossils are most frequently preserved as

pyrite casts; therefore H<sub>2</sub>S must have been there, and where H<sub>2</sub>S is, there is no oxygen and therefore the system is life threatening. My only explanation: very local, restricted on small areas. More iron ions than H<sub>2</sub>S would be a solution as well. Exception today: "Black smokers" at deep sea.



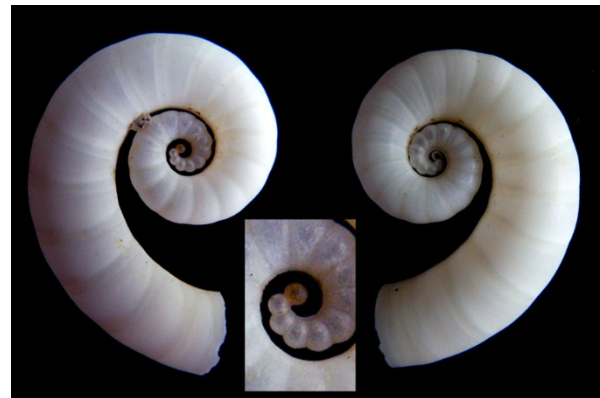
Book\_T30.1 scaburgense-Sz. Liesberg/CH  
Cidaris hugii (= 2 parts fixed together with adhesive)



SIN\_Cp7 019 Sea urchin spines  
Mostly broken pieces are found



0\_USR017x Kosmoceras lamberti-Sz./ Russia



Nz\_Ec 002 Spirula spirula  
In general rare findings on a beach. Exceptional at New Zealand approx. 200 with sea weed



Book\_T33.3 D-Kandern lamberti-Sz  
Interpretation as jaw or shutter (like Nautilus) disputed



Operculum: Turbo bruneus SIN\_La 007.02

One says if aptychi had been a shutter function, the animals would not have been able to breathe. Who knows? The same then one must say about snails. There are land snails which can completely close their shell over a long time in a dry period. (see pict. xy , page 97)

Different groups of species und their share by place.