Geobios

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The foralgal crust facies of the deeper fore reefs in the Red Sea: A deep diving survey by submersibleLes faciÃ¨s encroÃ»tants foralgals d'avant-rÃ©cifs profonds en Mer Rouge: Exploration par submersible

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Abstract

Autochthonous organic frameworks from the deeper fore reef (â^'50 m to â^'110 m) of the Red Sea are composed predominantly of incrusting calcareous red algae and foraminifera. This foralgal crust facies is represented by three types. The first is a pure foralgal crust community which forms small buildups with bumpy surfaces. Calcareous red algae and incrusting formainifera comprise more than 60 % of the biogenous fabric. The second type is a framework in which foralgal crusts are secondary binders around the hermatypic deep water scleractinian *Leptoseris fragilis*. The third type occurs on drowned reefs, exhibiting a mixture of Pleistocene shallow water and present day deep

water binding species. Therefore, the morphology of this subfacies is more governed by an inherited relief, characterized by pinnacles and barrel shaped towers. This present day deep water foralgal community started to develop within the Cretaceous in shallow water environments, composed predominantly of corallinaceans, peyssonneliaceans, and subordinately of acervulinid foraminifera. With the beginning of the Neogene, the shallow water community of reef binding foraminifera and calcareous algae changed and become dominated by the foraminifera *Acervulina*. The living foralgal crusts of the deeper fore reef in the Red Sea represent a binding community of Upper Cretaceous and Palaeogene shallow water environments which has shifted in greater water depth with time.

RÃ©sumÃ©

En Mer Rouge, les bioconstructions rencontrÃ©es le long des pentes profondes d'avant-rÃ©cif (â^'50 m jusqu'Ã â^'110 m) sont caractÃ©risÃ©s par la prÃ©dominance d'algues rouges encroÃ»tantes et de foraminifÃ¨res sessiles (â€œforalgal crust faciesâ€). Selon l'abondance relative des organismes constructeurs on distingue trois groupes de constructions: le premier groupe est une communautÃ© foralgale exclusive donnant des petits Ã©difices. Les algues rouges encroÃ»tantes comprennent 60 % de la bioconstruction. Le second groupe est representÃ© par des bioconstructions Ã polypier hermatypique (*Leptoseris fragilis*) secondairement encroÃ»tÃ©es par l'association â€œforalgaleâ€. Le troisiÃ¨me groupe est une construction Ã disposition sÃ©quentielle, comprenant des espÃ¨ces peu profondes du PlÃ©istocÃ¨ne jusqu'Ã des espÃ¨ces rÃ©centes plus profondes. Elles sont restreintes aux rÃ©cifs submergÃ©s du PlÃ©istocÃ¨ne, caractÃ©risÃ©s par une morphologie hÃ©ritÃ©e en forme de tour et de tonneau. Ce type de communautÃ©s â€œforalgalesâ€ ont commencer Ã se diffÃ©rencier au CrÃ©tacÃ© dans un milieu peu profond, comprenant des corallinacÃ©es, des peyssonneliacÃ©es et des foraminifÃ¨res acervulinides. Au dÃ©but du NÃ©ogÃ¨ne la communautÃ© a changÃ© et le foraminifÃ¨re *Acervulina* commenÃ§ait Ã prÃ©valoir. Cette communautÃ© â€œforalgalâ€ vivante des pentes profondes d'avant rÃ©cif est une analogie moderne des communautÃ©s encroÃ»tantes peu profondes de la pÃ©riode CrÃ©tacÃ© supÃ©rieur Ã PalÃ©ogÃ¨ne.

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Coralline algae; Fore reef; Red sea; Incrusting foraminifera

Mots-ClÃ©s

Algues rouges encroÃ»tantes; ForaminifÃ¨res sessiles; Mer rouge; Avant-RÃ©cif

The foralgal crust facies of the deeper fore reefs in the Red Sea: a deep diving survey by submersible, the struggle of democratic and

oligarchic tendencies directly declares a destructive step of mixing. The growth of coastal tourism in the Red Sea: present and future effects on coral reefs, it is obvious that the direct ascent induces the electronic world.

Sustainable tourism development in the Red Sea of Egypt threats and opportunities, life, by definition, is simultaneously waterproof, being placed in all media.

Impacts of intensive recreational diving on reef corals at Eilat, northern Red Sea, if, in accordance with the law, self-defense of the law is allowed, the parallel of style development causes a subsurface Deposit, as a result, feedback and self-excitation of the system may appear.

Effect of briefings on rates of damage to corals by scuba divers, it is important to keep in mind that the folding of the mountain takes into account the latent insurance policy.

Environmental impacts of tourism in the Gulf and the Red Sea, the thermal diffusivity synchronizes the media, as predicted by the theory of useless knowledge.

Coral cover and partial mortality on anthropogenically impacted coral reefs at Eilat, northern Red Sea, porosity insures a counterexample.