Juveniles and natural spawning observations

Observations of fission in La Reunion, Indian Ocean

From: Philippe Bourjon (seizhavel@wanadoo.fr)

On La Reunion Island, fission of *Holothuria atra* and *Stichopus chloronotus* has been studied and was first observed for *H. leucospilota* (Conand et al. 1997; Conand 2004; Kohler et al. 2009). The present observations confirm those of previous studies.

The interest in the inner reef flat of Planch'Alizés on Reunion Island lies in the high density of *H. atra* and *H. leucospilota* populations. This site has an average depth of less than 1 m, consists of a sandy substrate with some coral rubble, and is considered to be damaged. Eutrophication increases the concentration of organic matter, especially within the substrate. Eutrophication and constant pounding by "swimmers" walking in this popular shallow area may account for some of the fission inductors.

References

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Figure 1. Regenerating *Holothuria atra* (6.5 cm specimen) observed on the site of Planch'Alizés. Numerous juveniles and some individuals in the regeneration process were mixed with many *H. leucospilota* and *H. atra* adults.

Figure 2. *Holothuria atra* during the fission process. This specimen is on a sandy bottom substrate with coral rubble and living corals. Fission takes place at roughly 30% of the anterior portion of the body.