Photogallery

Focal white spots on *Porites* spp. from the north Andaman Sea, Western Thailand and the Wakatobi Marine National Park, Indonesia

P. SCAPS^{1,*} and J. HAAPKYLÄ²

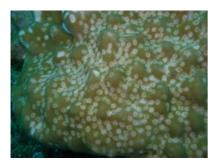
- ¹Laboratoire de Biologie Animale, Bâtiment SN3, Université des Sciences et Technologies de Lille, 59655 Villeneuve d'Ascq Cédex, France
- ² School of Marine and Tropical Biology, James Cook University, Queensland 4811, Australia

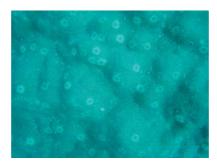
* Corresponding author: P. Scaps E-mail: patrick.scaps@univ-lille1.fr

Communicated by Hiroya Yamano (Editor-in-Chief)

Keywords

Focal bleached spots are commonly recorded on *Porites*, *Montipora* and *Acropora* (Beeden et al. 2008). During a diving expedition in April 2010 to the pinnacle of Hin Daeng ("Red Rock") (7°9′1″N; 98°49′20″E), in the Andaman Sea off Western Thailand, we discovered a new type of focal white spots on a massive colony of *Porites lobata* Dana, 1846. We observed multifocal bleached spots scattered densely over the surface of a colony of *P. lobata* (Fig. 1a). A similar observation was made in November 2010 on a *Porites* sp. colony from the North side of Hoga Island situated in the Wakatobi Marine National Park, South-East Sulawesi, Indonesia (Fig. 1b). At both locations, the spots were round to ovoid and about 1 cm in diameter (Fig. 1c). They differed from *Porites* ulcerative white spot disease (PUWS), a disease previously documented both from the Philippines (Raymundo et al. 2003) and Indonesia (Haapkylä et al. 2009) in that they were larger (1 cm in diameter) than those in PUWS (3–5 mm) and encircled a central area with non-bleached, live tissue (Fig. 1c). No observations of invertebrates or fish being associated with the massive colonies were made. Similar observations of focal white spots have previously been made on *Turbinaria peltata* from Japan (Yamashiro and Fukuda 2009) where focal bleaching on other coral genera also has been documented (Kim and Yamashiro 2007; Asoh 2008). Additional research is urgently needed on the initiation of the focal white spots, their prevalence, change and possible growth in time, in order to characterize whether they represent a new Indo-Pacific coral disease.





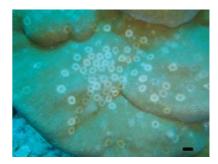


Fig. 1 a Focal white spots on the massive colony of *Porites lobata* from Thailand. b Focal white spots on *Porites* spp. from the Wakatobi Marine National Park, Indonesia. c Enlarged view of the spots (bar: 1 cm)

Acknowledgments

We would like to thank Charlie Lidureau for the logistical support and his staff (Seafarer Divers) during the fieldwork in Thailand and Operation Wallacea for logistical support in the Wakatobi.

References

Asoh K (2008) Loss of live tissue and exposure of coral skeleton in *Porites cylindrica* at Shiraho, Ishigaki Island, Japan. Galaxea J Coral Reef Stud 10: 43

Beeden R, Willis BL, Raymundo LJ, Page CA, Weil E (2008) Underwater cards for assessing coral health on Indo-Pacific Reefs. http://www.gefcoral.org

Haapkylä J, Unsworth RFK, Seymour AS, Melbourne-Thomas J, Flavell M, Willis BL, Smith D (2009) Spatio-temporal coral disease dynamics in the Wakatobi Marine Park, South-East Sulawesi, Indonesia. Dis Aquat Org 87: 105–115

Kim I, Yamashiro H (2007) Two species of cyclopoid copepods (Crustacea) inhabiting galls on scleractinian corals in Okinawa, Japan. J Crustacean Biol 27: 319–326

Raymundo LJH, Harvell CD, Reynolds TL (2003) *Porites* ulcerative white spot disease: description, prevalence, and host range of a new coral disease affecting Indo-Pacific reefs. Dis Aquat Org 56: 95–104

Yamashiro H, Fukuda M (2009) White spot syndrome of Turbinaria peltata in the temperate region of Japan. Coral Reefs 28: 893

Received: 12 February 2011/Accepted: 7 March 2011

© Japanese Coral Reef Society