Pink spots on *Porites*: not always a coral disease

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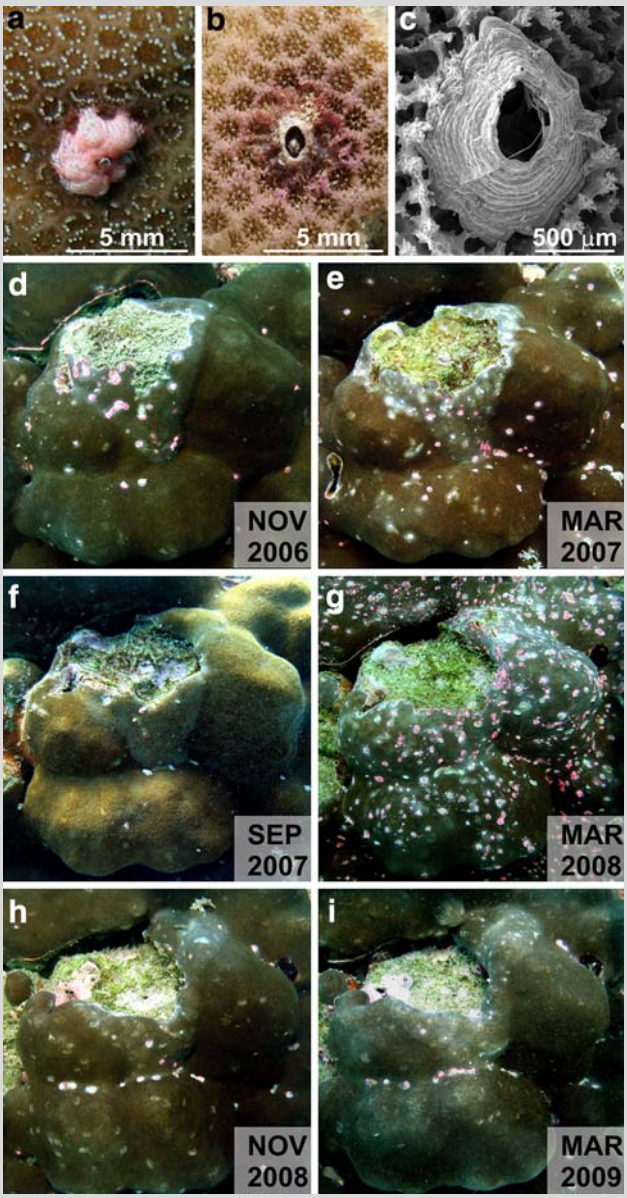

Fig. 1 **a** A pink spot in vivo showing the swollen coral tissue around the cirriped opening; **b** in a dry sample, the tissue coloration persists and the cirriped growing on the coral skeleton is visible; **c** SEM image of a newly settled cirriped on a *P. lutea* corallite; **d–i** the same photoquadrat (25-cm side) monitored from November 2006 to March 2009 shows the variations in pink spots density over time, the sampling month and year is indicated at the bottom right

Bright pink spots or lines can appear on the surface of *Porites* due to different mechanical disturbances and subsequent recovery (Schuhmacher 1992; van Woesik 1998). The pink spot disease (Aeby 1993) is an infection of *Porites* by trematode larvae manifesting as pink swollen nodules and ultimately leading to predation by fish. Similar nodules, between 3 and 5 mm in diameter, were observed in south Yemen during a long-term coral monitoring.

Pink spots were found on 20% of 682 *Porites lutea* colonies surveyed in 2006. Each observed spot consisted of swollen coral tissue (Fig. 1a) and a barnacle's cirri were observed expanding from it. Dry specimens study (Fig. 1b–c) confirmed that pyrgomatid cirripeds, commonly settling on scleractinian and hydrozoan coral colonies, were found below the pink spots. Hence, in our case, pink spots are the result of the mechanical/chemical stress caused by the cirriped larva settling on the living *Porites*.

The monitoring was conducted twice a year between November 2006 and March 2009 and considerable temporal variation in pink spots density was observed on the same colonies (Fig. 1d–i). During the whole period, the coral growth did not appear limited and no preferential predation of swollen polyps by fish was observed.

Our observations suggest that field records of pink spots on *Porites* may not always be the result of a disease caused by a trematodiasis type of infection. Therefore, an initial verification of a disease such as *Porites* trematodiasis is recommended before assigning a disease name.

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