

Larval release from *Tubastraea coccinea* in the Gulf of California, Mexico

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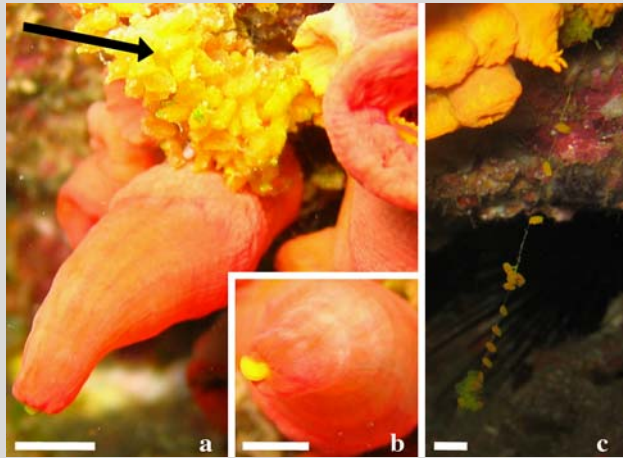


Fig. 1 Larvae release of *Tubastraea coccinea*. **a** Notice the “cone” produced by the eversion of the polyp mouth, and the accumulation of planulae (marked with an arrow), produced by an adjacent polyp; **b** close up of the polyp at the time of larvae release; **c** string of mucus with attached planulae. Pictures **a** and **b** from Punta Arenas (24°N), and **c** from San Marcos Island (27°N), in the Gulf of California. Scale bars 5 mm

The azooxanthellate coral *Tubastraea coccinea* Lesson, 1829 is a common species on the western coast of the Americas and is distributed from the Galápagos Islands, Ecuador, to 27°N in México, at depths of 0–108 m (Cairns 1991; Reyes-Bonilla et al. 2005). It is notorious as an aggressive invader of coral reefs of the western Atlantic (Fenner 2001; Creed 2006) but little is known of its biology. A release of planulae by *T. coccinea* was observed on **18 December 2006, at 3 m depth** (Fig. 1a, b) in Punta Arenas, southeast Gulf of California (24°03'40"N, 109°49'55"W). The colonies formed a large patch (10 m²) which grew on a shaded wall; coralla active in reproduction were 5 cm or more in maximum diameter, their larvae were a brilliant yellow color and measured between 3 and 5 mm long (Fig. 1b). Many planulae were attached to mucus strings that ran from the polyp mouth to the substrate (Fig. 1c). It appeared that after expulsion, the larvae moved along the string to the rock where they start crawling around the parental polyp. Planulation of *T. coccinea* has been observed at several locations in the gulf from San Marcos Island (27°N) to Cabo Pulmo reef (23°N) in the summer or fall of 2004–2006 when surface water was 25°C or higher. Considering the strong latitudinal change in oceanographic conditions along the Gulf of California, the presence of numerous reproductive populations of *T. coccinea* is a good indication of the physiological tolerance of the species.

These are the first field observations of reproduction in *Tubastraea* in the eastern Pacific, and emphasize the need for a detailed study of the reproductive pattern of this widespread coral.

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