

## Unprecedented massive reproduction aggregation of *Gymnodoris ceylonica*



**Fig. 1** Individuals of *Gymnodoris ceylonica* gathered in and around a coral colony (*Montipora* sp.), associated with massive loose egg string deposition.

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**Fig. 2** Coordinated movements of nudibranchs, full or empty of eggs, migrating in the same direction over the sand area.

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Opisthobranchs are hermaphrodite benthic animals that occur in seas worldwide. Mostly seen alone or in small groups, mass aggregations (from 30 up to hundred individuals) of nudibranchs have been reported for feeding or reproduction purposes (Claverie and Kamenos 2008). *Gymnodoris ceylonica* occurs in the Indo-Pacific area and is known to migrate by dozens to reproduce (Huang 2010). Here we report an exceptional massive aggregation of *G. ceylonica* occurring in the lagoon of Temae, Moorea Island, French Polynesia (Fig. 1). More than a thousand individuals were documented to reproduce from March 2 to 4, 2018, starting one day after the full moon, over a sand area of 500 m<sup>2</sup> (east point: 17°29'53.04"S 149°45'23.88"O/west point: 17°29'54.25"S 149°45'31.31"O) and at 2 m depth. Individuals were gathering on or under rocks associated with massive egg string deposition that were mostly loosely made (Fig. 1). *G. ceylonica* also aggregated on a large surface ‘‘aggregation field’’. Coordinated movements of nudibranchs were reported over the sand area with dozens of individuals migrating in the same direction (Fig. 2). This direction changed over day time: *G. ceylonica* were migrating to the barrier reef in the morning and to the shoreline in the afternoon. Migrating individuals were either full or empty of eggs irrespective of the direction (Fig. 2). With their nocturnal and cryptic activity, nudibranch biology still remains unclear and such events may help to better understand the biology of these species.

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### References

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