Genetic population structure of the bubble- tentacle anemone *Entacmaea quadricolor* in the Indo-Malay Archipelago

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The Bubble-tentacle sea anemone (*Entacmaea quadricolor*) is known to be one of the ten sea anemones species that host anemonefish. Additionally, their symbiotic relationships with zooxanthellae, which provides carbohydrates to the anemone for their nourishment and growth, has been well studied previously. Currently, sea anemones populations are facing two major issues: low tolerance to increasing water temperature, and overexploitation for the marine ornamental aquarium trade, which are leading to bleaching events across the Coral Triangle. Due to their pelagic larval stage and (semi)-sessile adult life these invertebrates are ideal candidates for larval dispersal studies, that has previously showed being an important tool to assess genetic exchange between populations. Samples of 106 individuals have been collected at 10 sites across the Indo-Malay Archipelago from 2004 to 2018. The aim of this study is to investigate the genetic population structure and connectivity of *E. quadricolor* using six microsatellite loci as molecular markers.

Keywords
Microsatellites; Larval Dispersal; Molecular Markers; Coral Triangle.