Settlement Data:

At Palmyra Atoll, a total of 300 settlement tiles were deployed at four sites on the fore reef at a depth of ~ 10 m (FR3, FR5, FR7, FR9), and six sites on the back reef at a depth of 3–5 m (RT1, RT4, RT10, RT13, EC1, EC2).

To measure benthic recruitment, settlement tiles were deployed in May/June 2013 at each of the 10 sites. Settlement tiles were made from terracotta and measured 10 × 10 × 1 cm with an 8 mm circular hole in the centre. Tiles were deployed onto stainless steel rods with a 1 cm high plastic spacer between the tile and the reef surface to create a cryptic space below the tile. The first group of tiles (Tile group A, 5 tiles per site) was collected in September 2013 after 3 months deployment, and fresh (new) tiles were deployed onto the same rods. These new tiles were collected and exchanged for fresh tiles in May/June 2014, after 9 months of deployment. The second group of tiles (Tile group B, 5 tiles per site) was collected and exchanged in May/June 2014, 1 yr after deployment. The third group of tiles (Tile group C, 5 tiles per site) was collected both in September 2013 and again in May/June 2014. These tiles were not exchanged for new tiles but analysed in the laboratory and then returned to their original rods within 24 h of collection. A final tile collection for all three groups was conducted in September 2014, by which time tiles from groups A and B had been deployed for 3 months and tiles from group C had been deployed for 15 months. In the laboratory, the tiles were kept in a temperature-controlled aquarium with bubblers to keep the benthic community on the tiles alive after collection. For all analyses, only the cryptic side (bottom) of the tiles was examined, because only 17 of 870 coral recruits settled on the top of the tiles.

For full methods details on lab examination: <https://link.springer.com/article/10.1007/s00338-018-1665-2>