

Supplementary material

Fig.1A: Map showing location of the study site and red soil pollution areas around Okinawa Island in 1992-1993 (dark colored areas in the map)

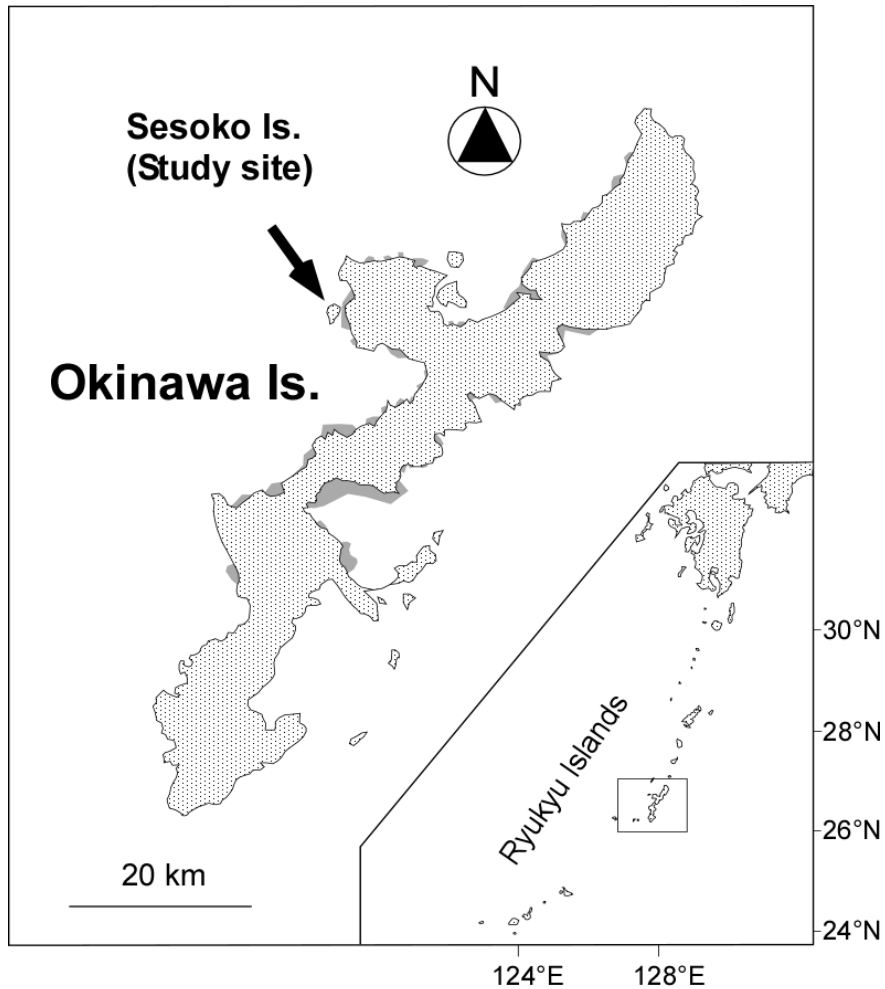


Fig.2A – Mean abundance ($n_{total} = 3343$) and species richness (47 coral reef species recorded) of larval fish caught by different light trap treatments per day (\pm SE).

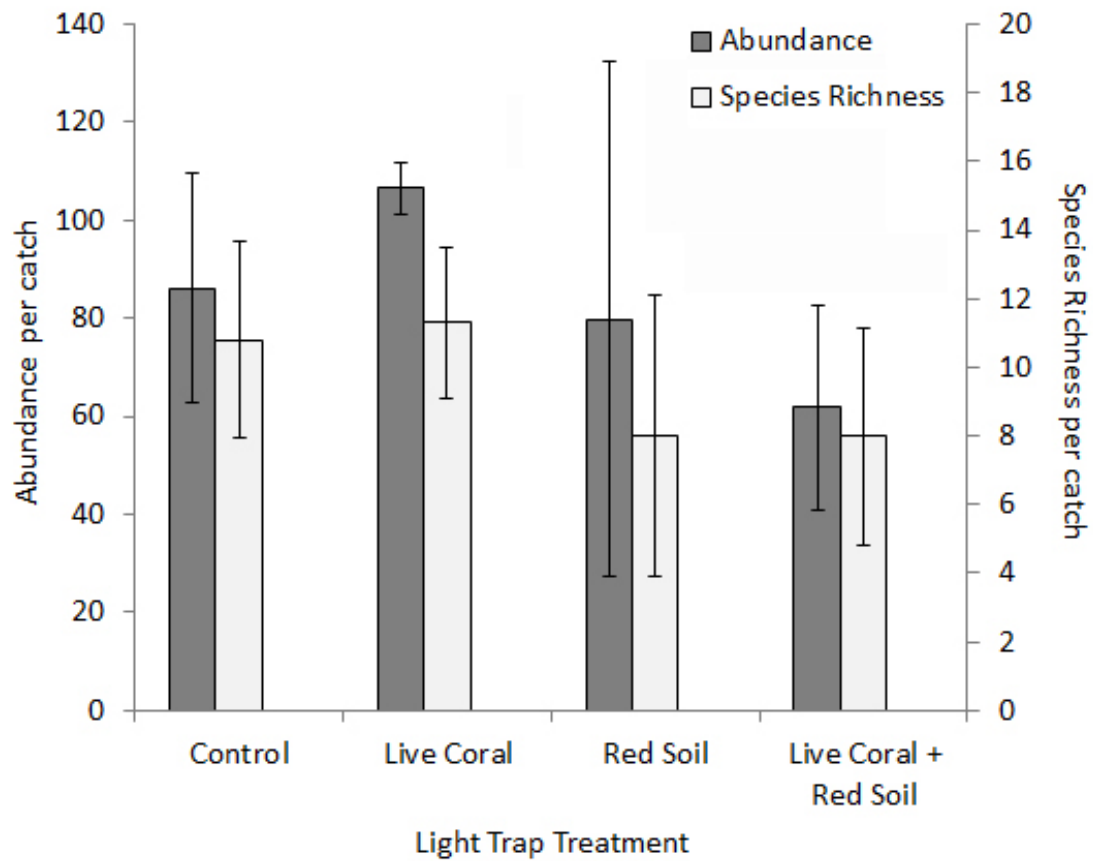


Table 1A. – General Linear Model of larval fish abundance in three light trap positions, predicting light traps containing red soil catch less than light traps free of red soil or with live coral.

Treatment	Estimate Std.	Error	z value	Pr (> z)
Control + Red Soil	0.76913	0.06376	12.06	< 0.001
Live Coral + Red Soil	1.15986	0.04062	28.55	< 0.001
Control	1.29586	0.04536	28.57	< 0.001
Live Coral	1.61244	0.03872	41.64	< 0.001

Table 2A: Mean pH levels for water from control and two red soil concentrations from 0-2 hours post-mixing and 3-7 days post-mixing

Treatment	Time	pH
Control	0h	8.10
50mgL ⁻¹	0h	8.09
200mgL ⁻¹	0h	8.08
Control	2h	8.10
50mgL ⁻¹	2h	8.09
200mgL ⁻¹	2h	8.07
Control	3days	8.10
50mgL ⁻¹	3days	8.09
200mgL ⁻¹	3days	8.06
Control	7days	8.10
50mgL ⁻¹	7days	8.08
200mgL ⁻¹	7days	8.04