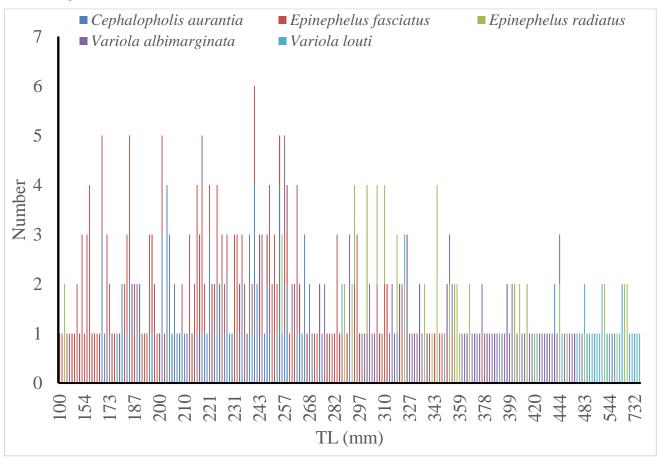
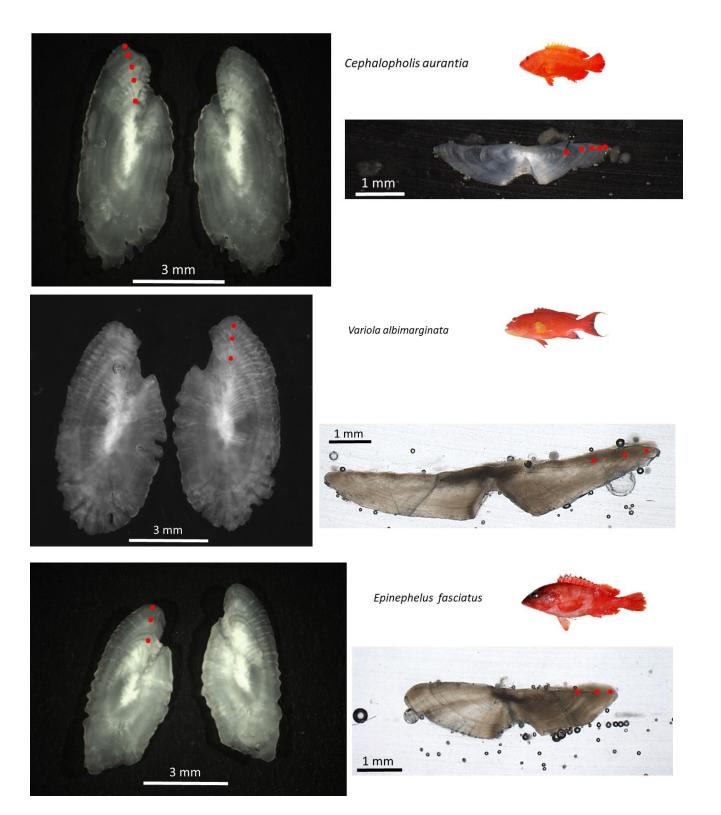


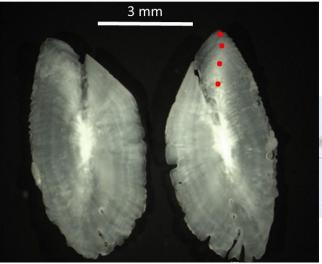
Supplementary Material

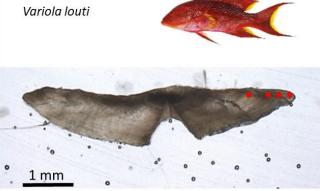
Supplementary Figure 1: Length distribution of the main grouper species around La Réunion Island (V. albimarginata : n=80; V. louti : n=31; E. fasciatus : n=165; C. aurantia : n=130; E. radiatus, n=76).



Supplementary Figure 2: Comparison of whole otolith and fine transverse section for the main grouper species around La Réunion Island. Each growth increment was identified by each red point.



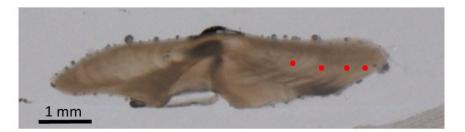




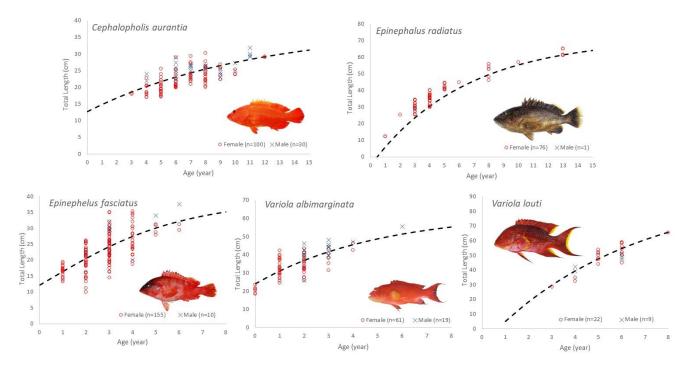


Epinephelus radiatus

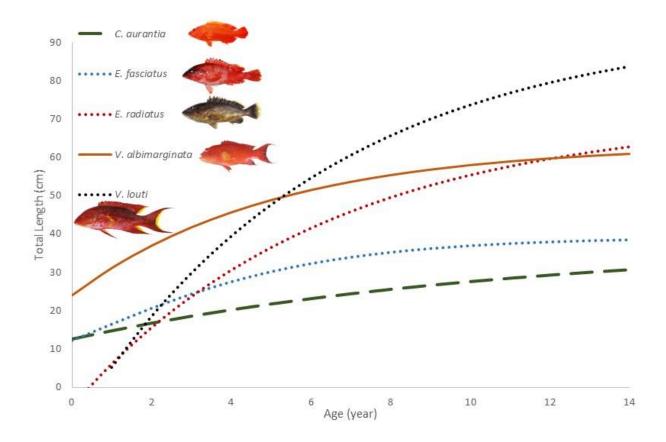




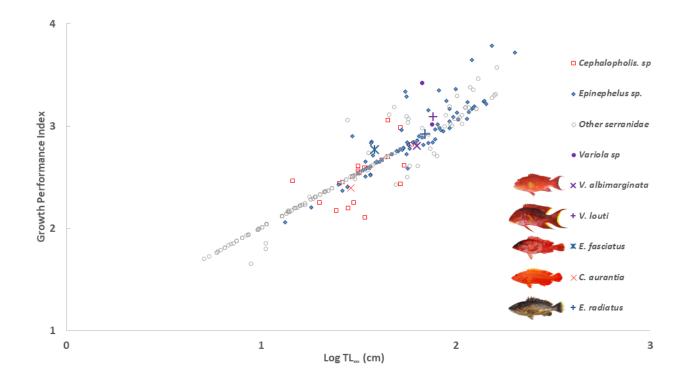
Supplementary Figure 3: Growth curve of groupers species around La Réunion Island fitted to all individual data with the observed age for females (red circle) and males (blue cross).



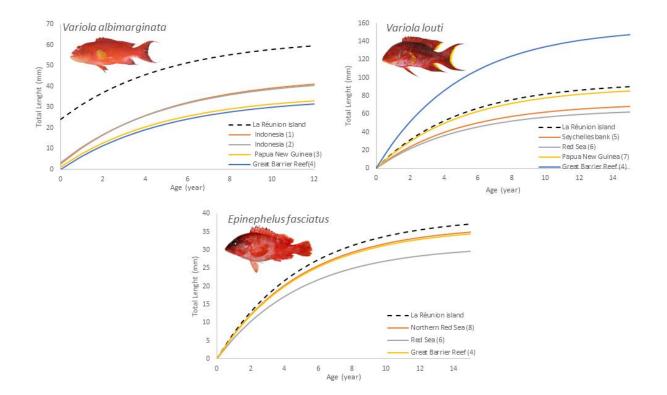
Supplementary Figure 4: Comparison of growth curves of the main grouper species around La Réunion Island.



Supplementary Figure 5: Relationship between growth performance index (φ) and asymptotic total length $TL\infty$ of five grouper species from La Réunion Island relative to other species of the Serranidae family (Source Fishbase, n=321 species, only the total length was used).



Supplementary Figure 6: Growth curves of three grouper species in the southern hemisphere (1: Rachmawati & Puspasari, 2021; 2: Ernawati et al., 2021; 3: Fry et al., 2006; 4:Mapleston et al., 2009; 5: Grandcourt, 2005; 6: Wahbeh, 2005; 7: Munro & Williams, 1985; 8: Saleh et al., 2019).



Supplementary Table 1: Number of fish used for marginal increment (MI) analysis by month and by species.

Month	Cephalopholis aurantia	Epinephelus fasciatus	Epinephelus radiatus	Variola albimarginat a	Variola louti	
January	5	9	19	9	5	
February		21	4	28	3	
March		14	38	2	3	
April	5	7		3	8	
May		10				
June	7	4	2			
July	11	1	10			
August	7	14	3	5	6	
September	29	37	2	2	2	
October	6	3		3		
November	16	11			1	
December	5	8			1	

Supplementary Table 2: Number of fish by sex (F: females; M: males) and sex-ratio (F/(M+F)*100) by month and by species.

Month	Cephalopholis aurantia			Epinephelus fasciatus		Epinephelus radiatus		Variola albimarginata			Variola louti				
	F	М	Sex-ratio	F	М	Sex-ratio	F	М	Sex-ratio	F	м	Sex-ratio	F	М	Sex-ratio
January	5	4	56%	10	0	100%	18	1	95%	19	4	83%	3	2	60%
February	14	3	82%	25	1	96%	4		100%	27	12	69%	4	0	100%
March	5	4	56%	19	0	100%	38		100%	3	1	75%	2	1	67%
April	9	2	82%	11	0	100%				3	1	75%	6	2	75%
May				17	0	100%									
June	8	0	100%	4	0	100%	2	0	100%						
July	10	1	91%	1	0	100%	10	0	100%						
August	3	3	50%	10	4	71%	3	0	100%	4	1	80%	3	3	50%
September	27	3	90%	40	1	98%	2	0	100%	2	0	100%	2	0	100%
October	7	1	88%	2	1	67%				3	0	100%			
November	8	8	50%	9	1	90%							1	1	50%
December	4	1	80%	9	0	100%							1	0	100%