

Table S1. Parrotfish species richness data from publications in the Negros Oriental region with a comparison to this publication (Sievers et al.).

Publication	Location(s)	Habitat	Life Stage	Richness
Russ et al., 2015	Apo, Sumilon	Coral Reef	Adult	20
McClure et al., 2020	Apo, Sumilon, Negros, Bohol, Siquijor	Coral Reef	Adult	22
McClure et al., 2020	Siquijor	Coral Reef	Adult	18
Stockwell et al., 2009	Negros, Mindanao	Coral Reef	Adult	21
Sievers et al., 2020	Siquijor	Coral Reef	Adult	18
Sievers et al.	Siquijor	Coral Reef + Non- Reef	Adult	19
Sievers et al.	Siquijor	Non-Reef	Adult	11
Sievers et al.	Siquijor	Non-Reef	Juvenile	15

Table S2. Results from sequence cleaning and blast data: F HQ and R HQ are the percentages of high-quality base pairs for the forward (F) and reverse (R) sequences. %GC is the percent of base pairs C and G. Alignment score is percent alignment between forward and reverse sequences. Ambiguities are for the consensus sequence. BLAST confidence was assigned based on criteria detailed in the main text. Accession numbers are for GenBank.

ID	F HQ (%)	R HQ (%)	GC (%)	Align Score (%)	Sequence Used	Ambiguities	Sequence Length	BLAST Confidence	Species ID	Accession Numbers
1	98	99	49.2	98.8	align	0	664	High	<i>Scarus quoyi</i>	
2	98	96	48.6	97.7	align	0	666	High	<i>Scarus rivulatus</i>	
3	98	67	48.9	98.8	align	0	660	High	<i>Scarus quoyi</i>	
4	97	96	48.7	96.4	align	1	675	Low	<i>Scarus rivulatus</i>	
5	98	96	48.8	97.6	align	0	676	Med	<i>Scarus rivulatus</i>	
6	96	97	48.7	97.5	align	0	674	Low	<i>Scarus rivulatus</i>	
7	99	95	48.9	98.4	align	0	669	Low	<i>Scarus rivulatus</i>	
8	98	97	48.7	98.2	align	0	673	Med	<i>Scarus rivulatus</i>	
9	8	25	47.3	11.9	reverse	130	976	High	<i>Scarus psittacus</i>	
10	99	95	48.7	98.2	align	0	669	Low	<i>Scarus rivulatus</i>	
11	95	93	48.9	97.3	align	0	671	Low	<i>Scarus rivulatus</i>	
12	98	96	49.0	98.8	align	0	672	High	<i>Scarus quoyi</i>	
13	97	96	48.8	96.2	align	0	680	Med	<i>Scarus rivulatus</i>	
14	98	98	48.7	98.5	align	0	675	Med	<i>Scarus rivulatus</i>	
15	99	97	48.6	97.3	align	0	677	Med	<i>Scarus rivulatus</i>	
16	98	98	48.7	97.6	align	0	672	Med	<i>Scarus rivulatus</i>	
17	98	96	48.7	98.1	align	1	674	Med	<i>Scarus rivulatus</i>	
18	99	96	48.2	98.8	align	0	674	High	<i>Scarus ghobban</i>	
19	99	97	48.6	97.6	align	0	675	Med	<i>Scarus rivulatus</i>	
20	97	97	48.9	98.2	align	0	675	High	<i>Scarus quoyi</i>	
21	98	98	48.4	97.9	align	1	674	High	<i>Chlorurus spilurus</i>	
22	64	53	47.4	78.9	align	33	681	High	<i>Scarus psittacus</i>	
23	85	87	47.4	98.1	align	1	684	High	<i>Scarus psittacus</i>	
24	47	49	47.9	79.9	align	19	688	High	<i>Scarus psittacus</i>	
25	94	94	47.7	99.0	align	0	684	High	<i>Scarus psittacus</i>	
26	81	85	47.7	97.1	align	1	681	High	<i>Scarus psittacus</i>	
27	99	98	48.7	97.9	align	0	676	Med	<i>Scarus rivulatus</i>	
28	99	99	48.5	98.5	align	0	674	Med	<i>Scarus rivulatus</i>	
29	62	66	47.7	92.5	align	2	684	High	<i>Scarus psittacus</i>	
30	99	99	48.6	98.7	align	0	675	Med	<i>Scarus rivulatus</i>	
31	71	74	47.4	94.6	align	3	699	High	<i>Scarus psittacus</i>	
32	98	97	48.3	94.9	align	1	693	Med	<i>Scarus rivulatus</i>	
33	10	68	46.3	64.3	reverse	na	697	High	<i>Scarus psittacus</i>	
34	69	75	47.5	94.7	align	2	682	High	<i>Scarus psittacus</i>	
35	98	99	47.4	99.0	align	0	680	High	<i>Scarus psittacus</i>	
36	30	26	46.3	35.1	align	42	681	High	<i>Scarus psittacus</i>	
37	81	84	47.2	95.7	align	2	704	High	<i>Scarus psittacus</i>	

38	92	96	47.5	97.8	align	1	682	Med	<i>Chlorurus bowersi/bleekeri</i>
39	98	97	48.0	96.5	align	0	689	High	<i>Scarus flavipectoralis</i>
40	91	92	46.9	96.0	align	0	699	High	<i>Scarus psittacus</i>
41	98	94	48.1	93.9	align	0	709	Med	<i>Scarus rivulatus</i>
42	83	75	47.1	95.9	align	0	684	High	<i>Scarus psittacus</i>
43	64	69	47.8	81.5	align	14	698	High	<i>Scarus psittacus</i>
44	75	98	47.6	96.2	align	1	633	High	<i>Scarus schlegeli</i>
45	73	71	47.6	87.7	align	5	684	High	<i>Scarus psittacus</i>
46	70	35	48.0	72.9	align	14	680	High	<i>Scarus psittacus</i>
47	97	97	48.7	97.7	align	0	682	High	<i>Scarus quoyi</i>
48	91	90	47.0	95.1	align	1	709	High	<i>Scarus psittacus</i>
49	99	97	48.5	96.3	align	0	697	Med	<i>Scarus rivulatus</i>
50	90	91	47.3	96.4	align	0	687	High	<i>Scarus psittacus</i>
51	84	78	47.4	97.1	align	1	685	High	<i>Scarus psittacus</i>
52	79	93	48.9	92.4	align	6	687	High	<i>Scarus quoyi</i>
53	98	99	48.4	97.7	align	0	682	Med	<i>Scarus rivulatus</i>
54	90	91	49.4	96.0	align	0	700	High	<i>Scarus spinus</i>
55	98	13	44.4	na	forward	na	640	Low	<i>Scarus rivulatus</i>
56	99	98	48.5	97.7	align	0	686	Med	<i>Scarus rivulatus</i>
57	99	97	46.7	97.0	align	2	689	Med	<i>Chlorurus bleekeri</i>
58	97	95	48.5	97.3	align	1	692	High	<i>Scarus quoyi</i>
59	98	98	48.7	96.1	align	0	684	High	<i>Scarus quoyi</i>
60	98	99	48.5	97.8	align	0	683	Low	<i>Scarus rivulatus</i>
61	97	95	48.7	96.0	align	0	679	High	<i>Scarus quoyi</i>
62	70	60	47.8	91.8	align	10	684	High	<i>Scarus psittacus</i>
63	87	83	47.4	93.7	align	2	683	High	<i>Scarus psittacus</i>
64	98	98	47.0	98.2	align	0	685	Med	<i>Chlorurus bleekeri</i>
65	89	91	47.9	97.2	align	0	682	Low	<i>Chlorurus bowersi/bleekeri</i>
66	99	95	48.5	97.5	align	1	680	Med	<i>Scarus rivulatus</i>
67	95	95	47.2	98.7	align	0	682	High	<i>Scarus psittacus</i>
68	98	97	48.0	96.2	align	0	687	Med	<i>Scarus rivulatus</i>
69	98	96	47.3	96.2	align	1	684	Med	<i>Chlorurus japanensis/capistratoides</i>
70	86	83	47.3	96.5	align	1	683	High	<i>Scarus psittacus</i>
71	91	44	47.6	96.9	align	0	680	High	<i>Scarus psittacus</i>
72	97	97	47.6	96.8	align	0	685	Low	<i>Chlorurus bowersi/bleekeri</i>
73	97	98	47.9	95.6	align	0	681	Med	<i>Scarus rubroviolaceus</i>
74	81	60	46.1	84.8	align	3	777	High	<i>Scarus psittacus</i>
75	51	3	47.6	46.3	forward	na	681	High	<i>Scarus psittacus</i>
76	97	94	48.5	94.4	align	0	684	Med	<i>Scarus rivulatus</i>

77	85	76	47.1	88.6	align	1	712	High	<i>Scarus psittacus</i>
78	96	96	48.5	94.7	align	0	683	Med	<i>Scarus rivulatus</i>
79	51	50	47.7	80.3	reverse	na	710	zero	couldn't ID
80	94	97	48.4	96.9	align	0	686	Med	<i>Scarus rivulatus</i>
81	95	94	48.4	96.4	align	1	701	High	<i>Scarus quoyi</i>
82	93	90	47.6	90.9	align	2	705	High	<i>Scarus psittacus</i>
83	86	73	47.4	84.3	align	1	686	High	<i>Scarus psittacus</i>
84	33	13	48.5	33.9	forward	na	694	High	<i>Scarus psittacus</i>
85	98	97	47.5	96.0	align	1	692	Med	<i>Scarus rubroviolaceus</i>
86	48	59	47.5	81.4	align	11	698	High	<i>Scarus psittacus</i>
87	87	85	47.0	94.4	align	1	712	High	<i>Scarus psittacus</i>
88	0	46	46.4	40.8	reverse	na	711	High	<i>Scarus psittacus</i>
89	71	67	47.1	94.5	align	2	696	High	<i>Scarus psittacus</i>
90	97	94	48.3	96.1	align	0	700	Med	<i>Scarus rivulatus</i>
91	0	0	44.5	0.1	not possible	na	2002	zero	couldn't ID
92	74	76	47.0	92.5	align	0	708	High	<i>Scarus psittacus</i>
93	60	61	48.9	95.7	align	0	698	High	<i>Calotomus spinidens</i>
94	90	94	48.4	96.0	align	0	696	Med	<i>Scarus rivulatus</i>
95	65	70	47.0	89.9	align	0	711	High	<i>Scarus psittacus</i>
96	83	87	46.7	94.9	align	0	711	High	<i>Scarus psittacus</i>
97	98	98	48.8	97.1	align	0	687	Med	<i>Scarus rivulatus</i>
98	90	94	44.9	95.1	align	1	712	High	<i>Anampses geographicus</i>
99	93	94	46.8	96.2	align	2	690	Med	<i>Scarus chameleon</i>
100	86	93	48.3	92.4	align	1	693	Med	<i>Scarus rivulatus</i>
101	35	32	47.5	38.6	forward	na	679	Med	<i>Scarus quoyi</i>
102	90	89	48.3	93.0	align	0	696	Med	<i>Scarus rivulatus</i>
103	97	97	48.3	96.6	align	1	686	Med	<i>Scarus rivulatus</i>
104	21	24	48.1	39.8	forward	na	713	Med	<i>Scarus quoyi</i>
105	89	91	47.0	92.9	align	0	709	High	<i>Scarus psittacus</i>
106	93	95	48.2	93.1	align	1	707	Med	<i>Scarus rivulatus</i>
107	98	95	48.5	95.9	align	1	690	Med	<i>Scarus rivulatus</i>
108	80	80	47.0	90.4	align	1	711	High	<i>Scarus psittacus</i>
109	98	94	48.5	96.4	align	1	692	Med	<i>Scarus rivulatus</i>
110	61	57	47.6	82.6	align	8	696	High	<i>Scarus psittacus</i>
111	58	26	48.1	67.6	forward	na	686	Med	<i>Scarus quoyi</i>
112	1	98	48.1	84.4	reverse	0	724	Med	<i>Chlorurus bowersi/bleekeri</i>
113	98	92	47.9	96.1	align	1	698	Med	<i>Scarus rivulatus</i>
114	56	56	46.9	78.1	align	10	685	High	<i>Scarus psittacus</i>
115	61	3	46.7	60.1	forward	34	716	High	<i>Scarus psittacus</i>
116	98	5	48.7	na	forward	na	634	Low	<i>Scarus rivulatus</i>
117	92	92	48.4	95.9	align	0	701	High	<i>Scarus quoyi</i>
118	95	96	48.1	94.5	align	3	693	High	<i>Chlorurus spilurus</i>

119	73	49	47.0	87.4	align	15	691	High	<i>Scarus psittacus</i>
120	35	37	47.6	53.8	forward	na	702	High	<i>Scarus psittacus</i>
121	30	34	47.6	47.1	forward	na	711	zero	couldn't ID
122	89	89	46.7	94.9	align	0	711	High	<i>Scarus psittacus</i>
123	99	95	47.3	94.7	align	2	696	Med	<i>Chlorurus</i> <i>bowersi/bleekeri</i>
124	99	97	48.5	98.3	align	1	687	Med	<i>Scarus rivulatus</i>
125	66	53	47.5	87.9	align	15	695	Med	<i>Scarus rubroviolaceus</i>
126	19	0	47.9	na	forward	0	645	High	<i>Scarus psittacus</i>
127	97	96	47.3	94.7	align	2	695	Med	<i>Scarus rubroviolaceus</i>
128	96	13	48.0	na	forward	na	639	Med	<i>Scarus rubroviolaceus</i>
129	96	93	47.8	92.8	align	1	685	Med	<i>Scarus rubroviolaceus</i>
130	98	93	47.5	95.3	align	1	687	Med	<i>Scarus rubroviolaceus</i>
131	94	93	48.2	93.0	align	1	710	High	<i>Calotomus spinidens</i>
132	82	79	47.2	97.7	align	0	695	High	<i>Scarus psittacus</i>
133	93	89	47.2	95.3	align	2	700	High	<i>Scarus psittacus</i>
134	98	95	48.0	96.2	align	2	692	Med	<i>Scarus rivulatus</i>
135	57	64	47.6	86.9	align	10	697	High	<i>Scarus psittacus</i>
136	94	90	46.8	94.8	align	0	697	Med	<i>Scarus chameleon</i>
137	96	92	48.6	89.9	align	1	685	High	<i>Scarus quoyi</i>
138	98	94	48.0	92.0	align	2	697	Med	<i>Scarus rivulatus</i>
139	21	26	47.6	52.0	reverse	na	710	High	<i>Scarus psittacus</i>
140	81	85	47.0	95.1	align	2	697	High	<i>Scarus psittacus</i>
141	94	91	47.0	93.7	align	2	703	High	<i>Scarus psittacus</i>
142	80	70	48.5	92.5	align	7	697	High	<i>Scarus quoyi</i>
143	72	71	46.9	85.2	align	5	698	High	<i>Scarus psittacus</i>
144	65	14	48.8	66.2	forward	43	681	High	<i>Scarus quoyi</i>
145	74	72	47.5	89.6	align	7	695	High	<i>Scarus psittacus</i>
146	17	24	47.5	42.2	reverse	na	702	High	<i>Scarus psittacus</i>
147	95	88	47.3	93.4	align	1	696	Med	<i>Chlorurus</i> <i>bowersi/bleekeri</i>
148	71	68	47.6	88.9	align	9	696	High	<i>Scarus psittacus</i>
149	98	94	46.4	94.7	align	0	698	High	<i>Chlorurus bleekeri</i>
150	96	94	47.6	93.0	align	0	700	High	<i>Chlorurus spilurus</i>
151	97	93	47.6	94.3	align	0	701	High	<i>Chlorurus spilurus</i>
152	95	94	48.2	93.0	align	2	682	High	<i>Scarus ghobban</i>
153	74	75	48.9	86.5	align	14	680	Med	<i>Scarus ghobban</i>
154	97	94	48.1	95.1	align	0	695	High	<i>Scarus quoyi</i>
155	90	88	47.0	94.7	align	3	694	High	<i>Scarus psittacus</i>
156	83	86	48.6	98.4	align	0	695	High	<i>Scarus quoyi</i>
157	95	93	48.2	95.7	align	1	697	High	<i>Calotomus spinidens</i>
158	96	94	48.3	96.7	align	0	698	High	<i>Calotomus spinidens</i>
159	96	94	47.9	94.4	align	2	695	Med	<i>Scarus rivulatus</i>

160	62	39	47.9	69.4	forward	na	697	zero	<i>couldn't ID</i>
161	56	48	47.8	79.8	forward	na	698	High	<i>Scarus psittacus</i>
162	81	81	47.0	94.8	align	1	695	High	<i>Scarus psittacus</i>
163	62	37	48.7	72.2	forward	na	695	High	<i>Scarus quoyi</i>
164	27	58	47.1	73.1	reverse	na	709	High	<i>Scarus psittacus</i>
165	36	41	48.3	59.6	reverse	na	706	Med	<i>scarus quoyi</i>
166	81	77	47.0	94.8	align	1	693	High	<i>Scarus psittacus</i>
167	35	39	47.5	48.6	forward	34	703	High	<i>Scarus psittacus</i>
168	88	86	46.9	95.8	align	2	696	High	<i>Scarus psittacus</i>
169	88	82	47.3	94.3	align	0	685	High	<i>Scarus psittacus</i>
170	94	1	50.8	na	forward	na	649	High	<i>Scarus psittacus</i>
171	94	93	46.7	94.4	align	1	698	High	<i>Scarus psittacus</i>
172	89	84	46.9	95.4	align	0	697	High	<i>Scarus psittacus</i>
173	92	90	46.8	94.7	align	0	696	High	<i>Scarus psittacus</i>
174	88	91	47.0	95.8	align	1	697	High	<i>Scarus psittacus</i>
175	81	73	47.6	83.6	align	2	683	High	<i>Scarus psittacus</i>
176	77	63	48.1	79.2	align	9	678	High	<i>Scarus psittacus</i>
177	97	85	46.8	89.9	align	2	696	High	<i>Scarus psittacus</i>
178	94	94	47.0	94.0	align	1	689	High	<i>Scarus psittacus</i>
179	91	86	47.0	93.3	align	3	697	High	<i>Scarus psittacus</i>
180	25	34	46.8	44.8	reverse	39	689	High	<i>Scarus psittacus</i>
181	94	86	46.8	95.8	align	1	697	High	<i>Scarus psittacus</i>
182	95	93	46.8	94.6	align	1	699	High	<i>Scarus psittacus</i>
183	15	18	46.9	37.0	align	38	703	High	<i>Scarus psittacus</i>
184	74	67	47.2	85.5	align	8	698	High	<i>Scarus psittacus</i>
185	86	73	46.4	90.3	align	1	701	High	<i>Scarus psittacus</i>
186	0	0	48.3	2.7	align	64	731	High	<i>Scarus psittacus</i>
187	57	62	47.7	88.7	reverse	na	697	High	<i>Scarus psittacus</i>
188	70	32	48.7	69.6	forward	na	685	High	<i>Scarus quoyi</i>
189	83	79	47.0	94.9	align	6	708	High	<i>Scarus psittacus</i>
190	89	75	47.2	94.8	align	0	695	High	<i>Scarus psittacus</i>
191	79	56	47.0	93.2	align	0	636	High	<i>Scarus psittacus</i>
192	28	35	47.9	51.2	forward	na	687	zero	<i>couldn't ID</i>
193	91	89	47.0	97.8	align	0	696	High	<i>Scarus psittacus</i>
194	87	79	46.9	94.7	align	1	695	High	<i>Scarus psittacus</i>
195	88	84	47.0	98.3	align	2	695	High	<i>Scarus psittacus</i>
196	11	4	48.1	18.6	align	30	689	Med	<i>Scarus psittacus</i>
197	57	19	47.9	62.4	forward	na	697	High	<i>Scarus quoyi</i>
198	84	79	47.0	87.7	align	3	700	High	<i>Scarus psittacus</i>
199	50	12	47.5	47.0	forward	na	685	High	<i>Scarus psittacus</i>
200	86	82	46.9	94.7	align	2	698	High	<i>Scarus psittacus</i>
201	92	88	46.8	93.0	align	1	698	High	<i>Scarus psittacus</i>
202	13	7	47.5	21.4	forward	na	695	High	<i>Scarus psittacus</i>

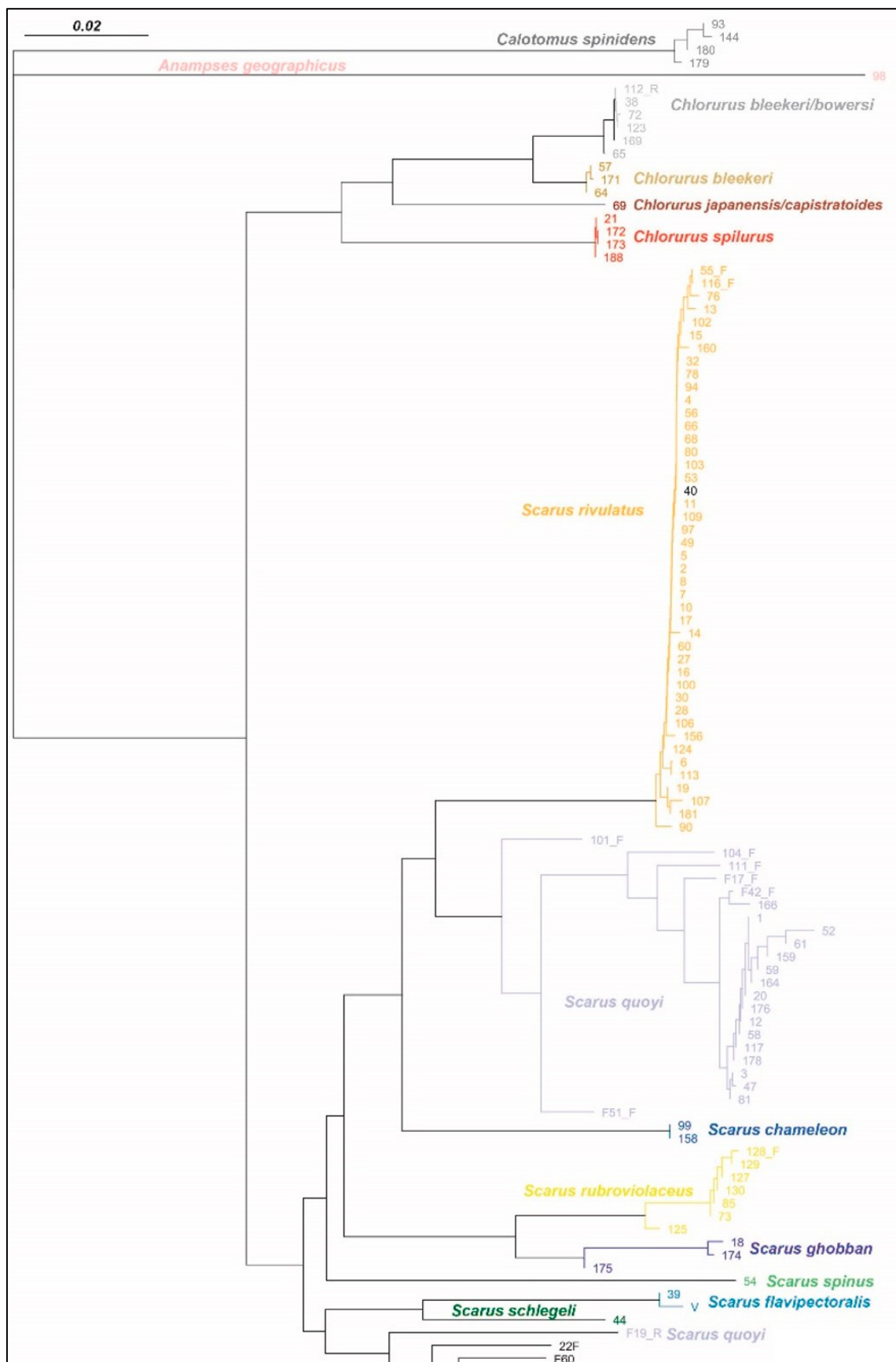
203	93	95	47.0	94.4	align	0	698	High	<i>Scarus psittacus</i>
204	71	69	48.0	80.4	align	6	693	High	<i>Scarus psittacus</i>
205	96	97	47.3	93.9	align	1	686	High	<i>Scarus psittacus</i>
206	96	96	46.9	94.1	align	1	696	High	<i>Scarus psittacus</i>
207	98	94	47.1	95.5	align	1	693	High	<i>Scarus psittacus</i>
208	97	97	47.1	95.2	align	0	683	High	<i>Scarus psittacus</i>
209	89	85	47.0	95.3	align	2	695	High	<i>Scarus psittacus</i>
210	96	97	47.2	94.8	align	0	705	High	<i>Scarus psittacus</i>
211	96	97	47.1	93.4	align	1	700	High	<i>Scarus psittacus</i>
212	97	98	47.3	96.5	align	0	687	High	<i>Scarus psittacus</i>
213	97	96	47.0	95.9	align	0	700	High	<i>Scarus psittacus</i>
214	95	92	49.0	94.0	align	1	682	High	<i>Scarus flavipectoralis</i>

Table S3. Average density per 1000-m² of adult parrotfish species observed on visual transects, separated by habitat type.

Species	Coral Reef	Algal Bed	Lagoon	Seagrass
<i>Calotomus spinidens</i>	0.0	5.9	0.0	11.9
<i>Chlorurus bleekeri</i>	15.0	5.3	3.2	0.0
<i>Chlorurus spilurus</i>	1.6	0.6	8.0	0.0
<i>Scarus chameleon</i>	0.5	0.2	5.6	1.4
<i>Scarus dimidiatus</i>	3.5	0.0	3.2	0.0
<i>Scarus flavipectoralis</i>	6.6	0.2	10.4	0.0
<i>Scarus ghobban</i>	0.3	0.0	0.8	0.0
<i>Scarus quoyi</i>	0.7	0.0	0.0	0.0
<i>Scarus rivulatus</i>	0.9	0.0	0.0	0.0
<i>Scarus schlegeli</i>	0.9	4.7	0.0	0.0
<i>Calotomus carolinus</i>	0.0	0.0	0.0	0.6
<i>Cetoscarus ocellatus</i>	0.1	0.0	0.0	0.0
<i>Hipposcarus longiceps</i>	1.2	0.0	0.0	0.0
<i>Leptoscarus vaigiensis</i>	0.0	0.2	0.0	0.0
<i>Scarus altipinnis</i>	3.8	0.0	0.0	0.0
<i>Scarus forsteni</i>	0.7	0.0	0.0	0.0
<i>Scarus hypselopterus</i>	4.1	12.1	3.2	0.3
<i>Scarus niger</i>	17.4	0.0	0.0	0.0
<i>Scarus tricolor</i>	2.0	0.0	0.0	0.0
Sum Total	59.3	29.3	34.2	14.2
% total DNA vs. sums total	50.6%	58.0%	90.7%	93.9%

Table S4. Mean and standard deviation (in parenthesis) of parrotfish density (individuals per 1000-m²) across habitat types, grouped by size (centimetres) bins of total length estimates (TL) from visual surveys.

	<6 cm	6–10 cm	11–15 cm	16–20 cm	>20 cm
Algal Bed	80.5 (167.6)	31.6 (81.3)	18 (58)	0.3 (2.1)	0 (0)
Coral Reef	0.7 (5.4)	13.5 (63.6)	20.2 (42.2)	11.6 (16.6)	15.2 (21.1)
Lagoon	196 (706.6)	102.9 (140.9)	11.8 (32.7)	0 (0)	0 (0)
Seagrass	31.1 (76.9)	39 (77.1)	9.6 (18.9)	0 (0)	0 (0)



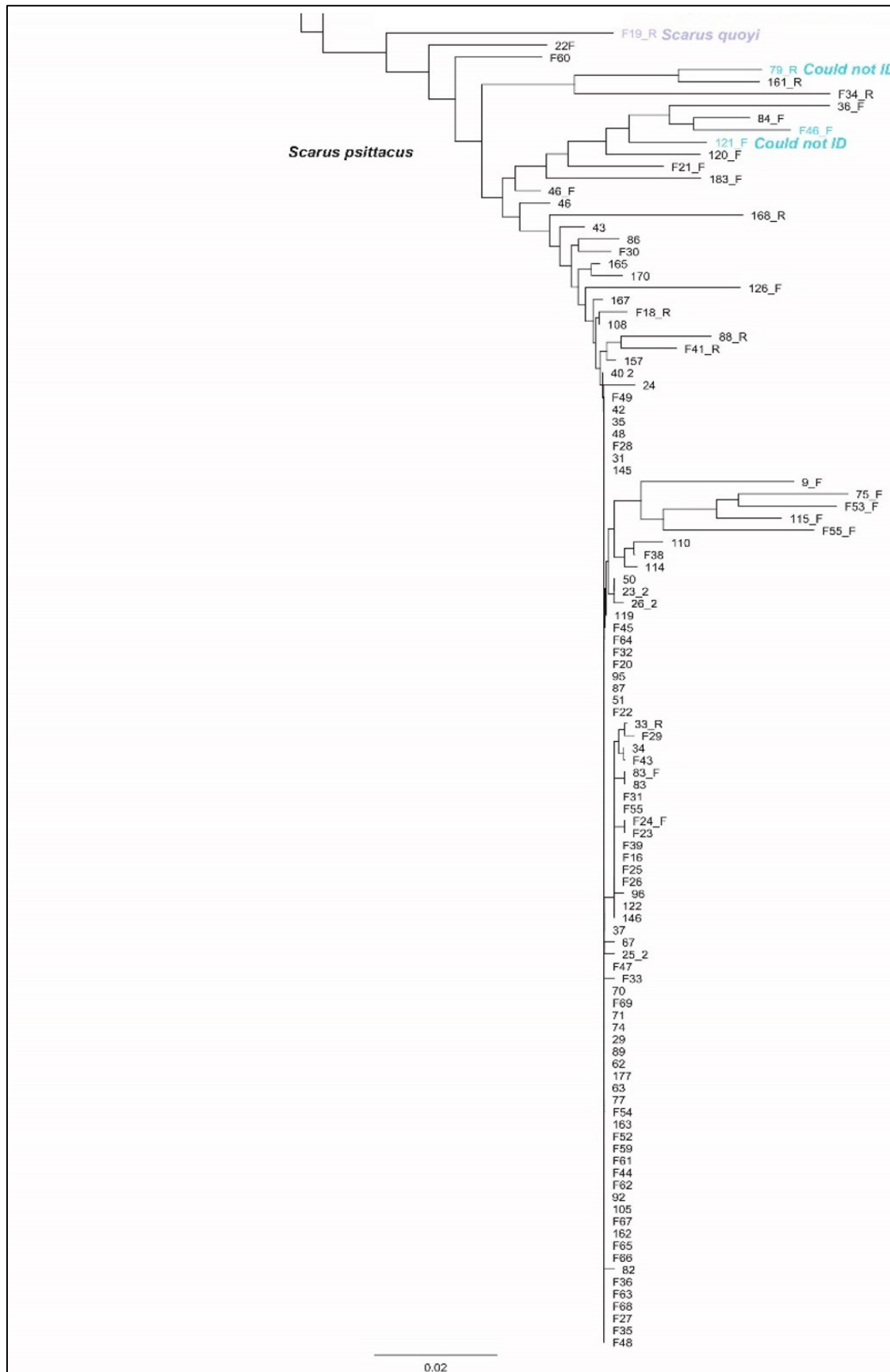


Figure S1. Phylogenetic tree generated in Geneious software for DNA sequences: The Geneious tree building method used neighbour joining tree and the Tamura-Nei genetic distance model, and no outgroup with 65% similarity.