

Supplementary Materials: Evidence for the Range Expansion of Ciguatera in French Polynesia: A Revisit of the 2009 Mass-Poisoning Outbreak in Rapa Island (Australes Archipelago)

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Table S1. Toxicity data of Rapa fish, according to species and sampling sites, as assessed by rRBA. Data are expressed in $\mu\text{g CTX3C eq kg}^{-1}$. Mean IC_{50} values for CTX3C and CTX1B were 0.62 and 0.26 ng mL^{-1} , respectively. Hence, a conversion factor of $\times 0.42$ should be applied to obtain rRBA CTX-like activity expressed in $\mu\text{g CTX1B eq kg}^{-1}$.

ID #	Size (cm)	Weight (g)	Feeding type ¹	Scientific name	Common name	Local name	rRBA
Akatamiro Bay and Motu Aturapa							
01	33	656	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	3.3
02	26	230	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	4.5
03	31	590	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	3.5
04	28	460	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	2.4
05	30	545	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	4.1
06	27	410	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	3.4
07	27	255	3	<i>Priacanthus hamrur</i>	Crescent-tail Bigeye	mata ana ana	2.7
08	30	420	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	4.5
09	34	535	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	5.6
10	34	440	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	2.2
11	35	740	3	<i>Parupeneus ciliatus</i>	Whitelined Goatfish	katuri	3.3
12	30	475	3	<i>Parupeneus ciliatus</i>	Whitelined Goatfish	katuri	5.4
13	31	500	3	<i>Parupeneus ciliatus</i>	Whitelined Goatfish	katuri	0.9
14	35	810	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	3.8
15	36	950	3	<i>Caranx ignobilis</i>	Giant Jack	pa'aihere	3.7
16	32	555	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.5
17	33	540	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	3.8
18	25	360	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.4
19	25	340	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.0
Turoa Pari Ati Bay							
20	25	278	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	4.0
21	22	237	1	<i>Scarus psittacus</i>	Palenose Parrotfish	pahoro	4.3
22	26	286	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	8.4
23	26	353	3	<i>Parupeneus ciliatus</i>	Whitelined Goatfish	katuri	5.8
24	28	340	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	4.3
25	22	327	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	3.3
26	22	275	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	3.7
27	33	537	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	4.5

28	33	548	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	5.3
29	32	582	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	4.1
30	35	789	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	4.5
31	25	339	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.5
32	26	445	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.7
33	32	887	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	1.2
34	36	813	3	<i>Coris aygula</i>	Clown Coris	haupa	<LOD ²
Tapuaki Bay							
35	19	183	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1,3
36	23	278	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	2,8
37	28	315	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	4,9
38	33	600	3	<i>Caranx ignobilis</i>	Giant Jack	pa'aihere	2,1
39	27	385	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	8,6
40	26	290	3	<i>Parupeneus multifasciatus</i>	Manybar Goatfish	atiatia	1,3
41	30	593	3	<i>Parupeneus multifasciatus</i>	Manybar Goatfish	atiatia	2,7
42	23	246	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0,9
43	27	442	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1,8
44	27	325	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	4,4
45	27	382	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	4,4
46	29	430	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	3,3
47	23	213	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	<LOD
48	37	980	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	0.8
49	44	1180	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	2.7
50	33	746	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	1.7
51	38	1110	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	0.7
Angananue Bay							
52	35	630	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	4.2
53	30	412	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	2.9
54	26	315	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.7
55	26	370	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.8
56	23	235	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.9
57	23	315	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	0.7
58	20	210	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.0
59	25	247	3	<i>Priacanthus hamrur</i>	Crescent-tail Bigeye	mata ana ana	<LOD
60	24	175	3	<i>Priacanthus hamrur</i>	Crescent-tail Bigeye	mata ana ana	1.0
Iripau Bay							
61	39	1050	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	<LOD
62	42	1190	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	1.0
63	42	1315	1	<i>Kyphosus vaigiensis</i>	Lowfin Chub	karamami ume	2.2
64	31	535	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.1
65	36	690	3	<i>Parupeneus ciliatus</i>	Manybar Goatfish	katuri	1.3
66	36	985	3	<i>Parupeneus ciliatus</i>	Manybar Goatfish	katuri	1.1
67	35	620	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.6

68	36	695	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.4
69	29	335	3	<i>Lutjanus kasmira</i>	Bluelined Snapper	ta'ape	1.6
70	28	405	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	4.8
71	24	280	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.5
72	22	255	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.5
73	23	310	1	<i>Ctenochaetus striatus</i>	Striated Surgeonfish	maito	1.0
74	22	250	1	<i>Ctenochaetus striatus</i>	Striated Surgeonfish	maito	7.3
Ana Rua Bay							
75	48	1700	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	1.1
76	40	1170	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	<LOD
77	30	465	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	<LOD
78	30	400	3	<i>Parupeneus ciliatus</i>	Manybar Goatfish	katuri	1.4
79	35	690	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.5
80	29	325	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.2
81	42	1590	1	<i>Kyphosus vaigiensis</i>	Lowfin Chub	karamami ume	2.4
82	35	765	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.8
83	29	420	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	<LOD
84	23	280	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	<LOD
85	19	170	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	<LOD
86	22	310	1	<i>Ctenochaetus striatus</i>	Striated Surgeonfish	maito	<LOD
87	23	280	1	<i>Ctenochaetus striatus</i>	Striated Surgeonfish	maito	<LOD
Agaira'o Bay							
88	42	1425	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	<LOD
89	35	775	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	0.2
90	28	345	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	2.2
91	25	290	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	2.0
92	44	1370	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	0.3
93	38	675	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	0.2
94	37	746	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	0.6
95	35	610	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	0.6
96	38	990	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	1.6
97	31	550	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	<LOD
98	30	553	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.4
99	30	530	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.6
100	28	510	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.4
101	29	335	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	10.0
102	29	430	3	<i>Parupeneus ciliatus</i>	Manybar Goatfish	katuri	2.0
103	19	192	1	<i>Ctenochaetus striatus</i>	Striated Surgeonfish	maito	6.0
104	18	170	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.0
Piriauta Bay							
105	50	1720	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	1.3
106	44	1625	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	0.7
107	40	1280	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	2.5

108	64	2740	3	<i>Seriola lalandi</i>	King Fish	ma'aki	0.9
109	50	2160	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	1.4
110	45	1580	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	2.1
111	37	1340	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	0.9
112	36	1060	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	2.2
113	36	670	3	<i>Parupeneus ciliatus</i>	Manybar Goatfish	katuri	1.8
114	35	705	3	<i>Parupeneus ciliatus</i>	Manybar Goatfish	katuri	1.8
115	33	765	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.4
116	31	714	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.5
117	37	750	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	<LOD
118	34	565	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	<LOD
119	36	690	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	3.5
120	33	545	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.7
121	23	300	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	<LOD
122	21	235	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.3
123	23	269	3	<i>Myripristis</i> sp.	Soldierfish	i'ihhi	2.7
124	22	266	3	<i>Myripristis</i> sp.	Soldierfish	i'ihhi	2.7

Motu Tarakoi

125	56	2540	3	<i>Epinephelus tauvina</i>	Greasy Grouper	faroa	<LOD
126	44	1480	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	1.2
127	34	800	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	1.5
128	37	760	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.5
129	36	680	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.6
130	42	1290	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	0.8
131	40	980	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	0.6
132	37	1250	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	1.2
133	36	1160	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	2.0
134	24	270	1	<i>Ctenochaetus striatus</i>	Striated Surgeonfish	maito	1.7
135	23	270	1	<i>Ctenochaetus striatus</i>	Striated Surgeonfish	maito	4.2
136	33	810	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.6
137	30	540	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.9
138	25	305	3	<i>Myripristis</i> sp.	Soldierfish	i'ihhi	4.0
139	25	430	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	0.8
140	20	190	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.3

Motu Ta'una

141	72	7750	1	<i>Kyphosus vaigiensis</i>	Lowfin Chub	ume	1.0
142	63	5150	1	<i>Kyphosus vaigiensis</i>	Lowfin Chub	ume	0.5
143	38	1365	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	1.4
144	36	970	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	1.0
145	45	1430	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	1.4
146	44	1670	1	<i>Chlorurus frontalis</i>	Tan-faced Parrotfish	uhu naonao	<LOD
147	38	970	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	0.7
148	32	645	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu royal	1.3

149	34	856	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	<LOD
150	31	575	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	<LOD
151	37	1070	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.5
152	35	690	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	0.7
153	37	780	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	0.8
154	26	425	3	<i>Myripristis</i> sp.	Soldierfish	i'ih	1.9
155	24	320	3	<i>Myripristis</i> sp.	Soldierfish	i'ih	1.3
156	26	310	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	14.5
157	22	300	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.5
158	20	215	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	<LOD

Akaomua Bay

159	56	3450	1	<i>Kyphosus cinerascens</i>	Highfin Chub	pakavai	<LOD
160	52	3015	1	<i>Kyphosus cinerascens</i>	Highfin Chub	pakavai	<LOD
161	41	1290	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	<LOD
162	36	760	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	<LOD
163	37	785	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	<LOD
164	34	590	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	<LOD
165	34	635	3	<i>Parupeneus ciliatus</i>	Manybar Goatfish	katuri	<LOD
166	28	570	3	<i>Parupeneus ciliatus</i>	Manybar Goatfish	katuri	0.8
167	34	530	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	<LOD
168	29	355	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	<LOD
169	29	530	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	<LOD
170	24	310	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	<LOD
171	19	235	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	<LOD
172	18	180	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	<LOD
173	25	200	3	<i>Priacanthus hamrur</i>	Crescent-tail Bigeye	mata ana ana	<LOD

Makatea Peak

174	66	2300	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	<LOD
175	37	730	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	<LOD
176	48	2010	1	<i>Scarus altipinnis</i>	Filament-finned Parrotfish	haumeretue	<LOD
177	46	1460	1	<i>Scarus altipinnis</i>	Filament-finned Parrotfish	roro	<LOD

Anatakuri Bay

178	39	160	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	1.2
179	36	1280	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	0.7
180	44	1240	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	<LOD
181	36	700	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	0.5
182	42	1345	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	1.0
183	42	1250	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	<LOD
184	35	870	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	<LOD
185	33	800	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.5
186	37	720	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	0.5
187	33	615	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	1.9

188	33	450	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	<LOD
189	61	2300	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	1.3
190	42	1460	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu royal	1.1
191	47	1540	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	<LOD
192	38	800	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	1.0
193	44	1530	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	0.6
194	35	1080	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	0.5
195	34	810	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.7
196	32	465	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	6.3
197	29	375	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	6.3
198	37	1250	3	<i>Monotaxis grandoculis</i>	Bigeye Emperor	mu	<LOD
199	35	545	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	<LOD
200	35	575	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	0.7
201	39	810	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	0.6
202	34	535	3	<i>Epinephelus fasciatus</i>	Blacktip Grouper	rari	0.6
203	26	370	1	<i>Naso unicornis</i>	Brown Unicornfish	ume tara	2.9
204	20	268	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.5
205	20	230	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	2.6

Motu Rapa Iti

206	69	7200	1	<i>Kyphosus vaigiensis</i>	Lowfin Chub	ume	5.7
207	52	3140	1	<i>Kyphosus cinerascens</i>	Highfin Chub	pakavai	1.2
208	47	2100	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	9.4
209	43	1450	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	7.8
210	48	1890	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	<LOD
211	43	1320	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	1.0
212	37	800	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	1.4
213	37	1000	1	<i>Kyphosus cinerascens</i>	Highfin Chub	nanue	<LOD
214	39	910	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	5.0
215	37	700	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	2.0
216	28	490	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	0.6
217	30	485	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	<LOD
218	31	400	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	8.5
219	29	360	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	10.8
220	23	315	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	1.3
221	23	280	1	<i>Acanthurus leucopareius</i>	Whitebar Surgeonfish	maamaa	2.3

Ahurei Bay

222	62	3680	3	<i>Plectropomus laevis</i>	Blacksaddle Coralgrouper	tonu	2.1
223	48	1875	3	<i>Plectorhinchus picus</i>	Spotted Sweetlips	matuatua	1.5
224	47	1605	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	1.9
225	40	990	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	2.4
226	31	615	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	2.5
227	31	570	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	2.0
228	27	240	3	<i>Epinephelus merra</i>	Honeycomb Grouper	tarao	<LOD

229	26	245	3	<i>Epinephelus merra</i>	Honeycomb Grouper	tarao	1.4
230	27	310	3	<i>Epinephelus merra</i>	Honeycomb Grouper	tarao	<LOD
231	28	300	3	<i>Epinephelus merra</i>	Honeycomb Grouper	tarao	<LOD
232	32	535	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	1.1
233	25	270	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	1.0
234	53	2610	3	<i>Caranx ignobilis</i>	Giant Jack	pa'aihere	1.7
235	50	2260	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	10.7
236	42	1680	1	<i>Chlorurus microrhinos</i>	Steephead Parrotfish	uhu raepuu	8.8
237	34	680	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	12.4
238	34	610	1	<i>Leptoscarus vaigiensis</i>	Seagrass Parrotfish	komokomo	2.7
239	27	415	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.2
240	26	345	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	1.8
241	32	470	3	<i>Goniistius plessisi</i>	Plessis' Morwong	pakakea	9.7
242	40	1175	3	<i>Caranx ignobilis</i>	Giant Jack	pa'aihere	0.6
243	29	430	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	2.0
244	29	385	3	<i>Pseudocaranx dentex</i>	Thicklipped Jack	matu	1.6
245	34	420	2	<i>Crenimugil crenilabis</i>	Fringelip Mullet	tehu	1.5
246	27	330	3	<i>Priacanthus hamrur</i>	Crescent-tail Bigeye	mata ana ana	1.1
247	24	213	3	<i>Priacanthus hamrur</i>	Crescent-tail Bigeye	mata ana ana	1.4
248	27	385	3	<i>Lutjanus kasmira</i>	Bluelined Snapper	ta'ape	1.1
249	23	255	1	<i>Kyphosus cinerascens</i>	Highfin Chub	karamami	<LOD
250	40	856	2	<i>Crenimugil crenilabis</i>	Fringelip Mullet	tehu	<LOD
251	33	628	2	<i>Crenimugil crenilabis</i>	Fringelip Mullet	tehu	1.7

¹Feeding type codes: (1) mainly plants/detritus - (2) plants/detritus + animals - (3) mainly animals.

²Fish samples with a CTX-like activity < 0.31 µg CTX3C eq kg⁻¹.

Table S2. Selected *m/z* transitions and LC-MS/MS instrument parameters used for the scheduled MRM method.

Compound	Detection window (min)	Precursor ion (Q1) <i>m/z</i>	Product ion	DP (eV)	CE (eV)	CXP (eV)	
			(Q3) <i>m/z</i>				
CTX1B	3.1 ± 1	1128.6 [M+NH ₄] ⁺	1093.6	105	20	12	
			1075.6	105	30	12	
			95.1	105	90	20	
M- <i>seco</i> -CTX3C	4.7 ± 1	1041.6 [M+H] ⁺	1023.6	105	30	12	
			1005.6	105	20	12	
			125.1	105	50	18	
2-hydroxyCTX3C and 3-hydroxyCTX3C	5.4 ± 1	1058.6 [M+NH ₄] ⁺	1023.6	105	30	12	
			1005.6	105	20	12	
			125.1	105	50	18	
2,3-dihydroxyCTX3C	6.0 ± 1	1074.6 [M+NH ₄] ⁺	1039.6	105	30	12	
			1057.6 [M+H] ⁺	1039.6	105	20	12
			125.1	105	50	18	
51-hydroxyCTX3C	6.3 ± 1	1056.6 [M+NH ₄] ⁺	1021.6	105	30	12	
			1039.6 [M+H] ⁺	1021.6	105	20	12
			1003.6	105	20	12	
M- <i>seco</i> -CTX4A/B	6.5 ± 1	1096.6 [M+NH ₄] ⁺	1043.7	105	30	12	
			1079.6 [M+H] ⁺	1043.7	105	20	12
			125.1	105	50	18	
52- <i>epi</i> -54-deoxyCTX1B and 54-deoxyCTX1B	6.8 ± 1	1112.6 [M+NH ₄] ⁺	1077.6	105	20	12	
			1059.6	105	30	12	
			95.1	105	90	20	
CTX3C isomers (1), (2) and (3)	7.6 ± 1	1040.6 [M+NH ₄] ⁺	1005.6	105	30	12	
			1023.6 [M+H] ⁺	1005.6	105	20	12
			125.1	105	20	12	
CTX3C, CTX3B and CTX3C isomer (4)	10.5 ± 1	1040.6 [M+NH ₄] ⁺	1005.6	105	30	12	
			1023.6 [M+H] ⁺	1005.6	105	20	12
			125.1	105	50	18	
CTX4A and CTX4B	12.2 ± 1	1078.6 [M+NH ₄] ⁺	1043.6	105	30	12	
			1061.6 [M+H] ⁺	1043.6	105	20	12
			125.1	105	50	18	

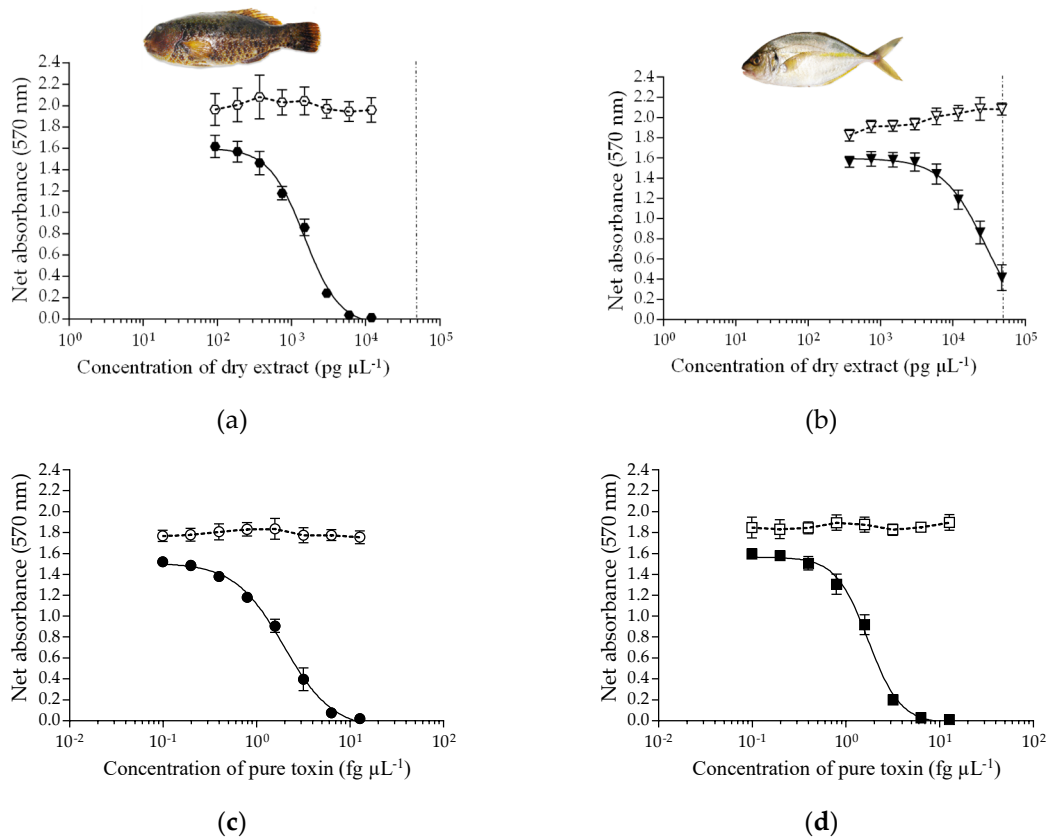





Figure S1. Composite toxicity dose-response curves of N2a cells in OV- (open symbols) and OV+ (solid symbols) conditions when exposed to increasing concentrations of LF100 extracts and pure Pacific CTXs. (a) *Leptoscarus vaigiensis* #214; (b) *Pseudocaranx dentex* #211; (c) CTX3C; (d) CTX1B. Data represent the mean ± SD of three independent experiments, each concentration run in triplicate (n = 9). The dotted vertical line corresponds to the maximum concentration of LF100 dry extracts for matrix interference (MCE = 50,000 pg μL⁻¹). Mean EC₅₀ values for CTX3C and CTX1B were 1.91 ± 0.22 and 1.72 ± 0.17 fg μL⁻¹ (from three independent experiments).

French Polynesia Ciguatera and seafood poisoning Surveillance Network

DECLARATION FORM

PATIENT

Age years Sex: F M

CONTEXT OF POISONING

Date of consumption

Local name of marine product responsible for the poisoning

Part(s) consumed Flesh Head Viscera Eggs

Specify the fishing spot (Mark with a cross on the map)

Region/town Island

bought on the roadside bought at the market / store (specify)

CLINICAL DATA

INTENSITY			<i>For information: if the patient presents with fever patient and / or allergic reactions and / or skin rash, the diagnosis of ciguatera must be rejected.</i>
Mild	Moderate	High	
CARDIOVASCULAR SIGNS			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bradycardia
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tachycardia
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hypotension
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hypertension
DIGESTIVE SIGNS			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nausea
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vomiting
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Diarrhea
GENERAL AND NEUROLOGICAL SIGNS			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tingling extremities (hands, feet)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Touch, neuro-sensitives disturbances
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dysesthesia (in contact with cold / hot)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Itching
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Asthenia
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Headache
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dizziness / Balance or walking disorders (<u>underline</u>)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vision disorders
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Muscular disorders (pain, cramps, weaknesses ...)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Joint pain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hypotermia : Temperature <input style="width: 50px;" type="text"/> °C
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Burn / tingling of lips, mouth, throat
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Orofacial pain (teeth, jaw, face)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dysgueusia (taste alteration)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Urogenital discomfort/ itching / burning
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hallucinations

Other symptoms/Observations

Time elapsed between the meal and the onset of symptoms < 30 min < 2h < 12h > 12h

Number of previous CFP/PSP

Number of other person(s) also concerned by the poisoning (*in addition to the patient*)

MEDICAL STRUCTURE IDENTIFICATION

Date of consultation Island/ Town

Medical structure First aid post Infirmary Medical Center Hospital Private Other

Please send the form to
 LMT - Institut Louis Malardé BP 30 98713 TAHITI | Tél: (689) 40 416 411 - Fax: (689) 40 416 406 | Mail: veille.ciguatera@ilm.pf
 Vous avez également la possibilité de faire la **déclaration directement en ligne sur www.ciguatera.pf**

Figure S2. Standardized declaration form for Ciguatera and seafood poisoning cases.