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SCIENTIFIC NOTE

INSHORE FISHES AT TAI-PIN ISLAND (SOUTH CHINA SEA)[1]

KUN-HSIUNG CHANG, RONG-QUEN JAN and CHANG-SHENG HUA

Institute of Zoology, Academia Sinica
Taipei, Taiwan 115
Republic of China

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Comparing with the extensive survey of fish fauna from the waters around Taiwan and its adjacent islands[1-7,10,11], less attention was paid to that in the South China Sea[8].

Tai-pin Island, a southernmost islet of the Republic of China, is located at 10°22′N; 114°22′E. This islet is about 1500 km away from Taiwan southwestward and surrounded by the vast province of the South China Sea. An expedition of fish fauna investigation of the islet was made in January 1981. The presented note is based on the data collected by underwater survey of some spots southward to the islet with a total area of approximate 800 m^2. During the survey, fishes were censused by SCUBA divers and some were collected by rotenone poisoning. The species identification was conducted by specimen examination and underwater observation, supplemented with underwater fish pictures.

A list of fishes with 173 species belong to 33 families was shown in Table 1. For each

TABLE 1.

List of recorded fishes, for each species the ecological category is also given.

Family and species	Ecological category*
Congridae	
1. *Conger cinereus* RÜPPELL	4
Ophichthidae	
2. *Ophichthus* sp.	5
Muraenidae	
3. *Echidna nebulosa* (AHL)	4
4. *Gymnothorax* sp.	4

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* 1. Fishes swimming above the coral heads or patches and moving away from them farther than 3 m (in the vertical direction) when the depth of water allows it (reef slopes, pools).
2. Fishes swimming around, and above the coral heads patches, but never swimming away farther than 3 m.
3. Fishes living (during daytime) under overhangs.
4. Fishes living in the network of cavities in the reef flat.
5. Fishes living in connection with the sediment.
6. Fishes linked to corals.
7. Fishes living in symbiosis with reef invertebrates other than corals.

TABLE 1. (continued).

Family and species	Ecological category
Synodontidae	
5. *Synodus variegatus* (LACÉPÈDE)	5
Holocentridae	
6. *Adioryx spinosissimus* TEMMINCK et SCHLEGEL	3
7. *A. spinifer* (FORSSKÅL)	3
8. *A. caudomaculatus* RÜPPELL	3
9. *A. lacteoguttatus* (CUVIER)	3
10. *Flammeo sammara* (FORSSKÅL)	2
11. *Myripristis murdjan* (FORSSKÅL)	3
Mullidae	
12. *Parupeneus barberinus* (LACÉPÈDE)	2
13. *P. bifasciatus* (LACÉPÈDE)	2
14. *P. trifasciatus* (LACÉPÈDE)	2
15. *P. pleurospilos* (BLEEKER)	2
Apogonidae	
16. *Apogon bandanensis* BLEEKER	3
17. *A. robustus* (SMITH & RADCLIFFE)	3
18. *Cheilodipterus macrodon* (LACÉPÈDE)	3
19. *C. quinquelineatus* CUVIER et VALENCIENNES	3
Malacanthidae	
20. *Malacanthus latovittatus* (LACÉPÈDE)	2
Serranidae	
21. *Cephalopholis urodelus* (BLOCH et SCHNEIDER)	4
22. *Epinephelus megachir* (RICHARDSON)	4
23. *E. merra* BLOCH	4
24. *E. fario* (THUNBERG)	4
25. *E. fasciatus* (FORSSKÅL)	4
26. *E. cometae* (TANAKA)	4
27. *E. haxagonatus* (BLOCH & SCHNEIDER)	4
28. *E.* sp.	4
Plesiopidae	
29. *Plesiops coerulineatus* RÜPPELL	4
Pseudochromidae	
30. *Dampieria* sp.	4
Nemipteridae	
31. *Scolopsis bilineatus* (BLOCH)	2
32. *S. cancellatus* (CUVIER et VALENCIENNES)	2
Lethrinidae	
33. *Gnathodentex aurolineatus* (LACÉPÈDE)	2
34. *Letherinus reticulatus* VALENCIENNES	2
35. *L. kallopterus* BLEEKER	2
36. *Monotaxis grandoculis* (FORSSKÅL)	2
Lutjanidae	
37. *Lutjanus kasmira* (FORSSKÅL)	2

TABLE 1. (continued).

Family and species	Ecological category
38. *Aprion virescens* CUVIER et VALENCIENNIS	2
39. *Macolor niger* (FORSSKÅL)	2
Caesionidae	
40. *Caesio xanthonotus* BLEEKER	1, 2
41. *C. tile* CUVIER et VALENCIENNES	1, 2
42. *C. diagramma* (BLEEKER)	1, 2
43. *C. caerulaureus* LACÉPÈDE	1, 2
Cirrhitidae	
44. *Cirrhitichthys serratus* RANDALL	6
45. *Paracirrhities arcatus* (CUVIER)	6
46. *P. foresteri* (SCHNEIDER)	6
Scombridae	
47. *Gymnosarda unicolor* (RÜPELL)	1
Centrolophidae	
48. *Hyperoglyphe japonica* (DÖDERLEIN)	1
Carangidae	
49. *Trachinotus bailloni* (LACÉPÈDE)	1
50. *Caranx ignobilis* (FORSSKÅL)	1
Mugiloidae	
51. *Parapercis polyophthalma* (CUVIER et VALENCIENNES)	5
52. *P. clathrata* (OBILBY)	4
Blennidae	
53. *Plagiotrimus rhinorhychus* (BLEEKER)	2
54. *P. townsendi* (REGAN)	2
55. *Salarias fasciatus* (BLOCH)	4
56. *Cirripctes* sp.	4
57. *Istiblennius* sp. A	4
58. *I.* sp. B	4
Gobiidae	
59. *Ptereleotris evides* (JORDAN et HUBBS)	2
60. *Eleotriodes strigatus* (BROUSSONET)	2
61. *Gobidon citrinus* (RÜPPELL)	6
Pomacentridae	
62. *Amphiprion frenatus* BREVOORT	7
63. *A. clarkii* BENNETT	7
64. *A. ocellalis* CUVIER	7
65. *A. sandracinos* ALLEN	7
66. *Chromis notatus* (TEMMINCK et SCHLEGEL)	2
67. *C. vanderbilti* FOWLER	6
68. *C. margaritifer* FOWLER	2
69. *C. weberi* FOWLER et BEAN	2
70. *C. caerulus* (CUVIER et VALENCIENNES)	6
71. *C. atripes* FOWLER et BEAN	2
72. *Dascyllus reticulatus* (RICHARDSON)	6
73. *D. aruanus* (LINNAEUS)	6

TABLE 1. (continued).

Family and species	Ecological category
74. *D. trimaculatus* (RÜPPELL)	2, 6, 7
75. *Pomacentrus amboinensis* BLEEKER	2
76. *P. bankanensis* GÜNTHER	2
77. *P. philippinus* FOWLER et BEAN	2
78. *P. lepidogenys* FOWLER et BEAN	2
79. *P. vaiuli* JORDAN and SEAL	2
80. *Glyphidodontops rex* (SNYDER)	2
81. *G. cyaneus* (QUOY and GAIMARD)	2
82. *G. glaucus* (CUVIER et VALENCIENNES)	2, 4
83. *G. leucopomus* (LESSON)	2, 4
84. *G. biocellatus* (QUOY and GAIMARD)	2
85. *G.* sp.	2
86. *Eupomacentrus nigricans* (LACÉPÈDE)	2
87. *Abudefduf vaigiensis* (QUOY et GAIMARD)	2
88. *Paraglyphidodon melas* (CUVIER et VALENCIENNES)	2
89. *P. melanopus* BLEKER	2
90. *P. behni* BLEEKER	2
91. *Plectroglyphidodon lacrymatus* (QUOY and GAIMARD)	2
92. *P. dickii* (LIÉNARD)	2
93. *P. leucozona* (BLEEKER)	2, 4
94. *Dischistodus notopthalmus* (BLEEKER)	2
Labridae	
95. *Choerodon azurio* (JORDAN et SNYDER)	2
96. *Bodianus diana* (LACÉPÈDE)	2
97. *B. axillaris* (BENNETT)	2
98. *B. bilinulatus* (LACÉPÈDE)	2
99. *B. loxozonus* (SNYDER)	2
100. *B. mesothorax* (BLOCH et SCHNEIDER)	2
101. *Anampses meleagrides* CUVIER et VALENCIENNES	2
102. *A. twistii* BLEEKER	2
103. *Gomphosus varius* LACÉPÈDE	2
104. *Thalassoma quinquevittata* (LAY et BENNETT)	2
105. *T. hardiwicke* (BENNETT)	2
106. *T. lunare* (LINNAEUS)	2
107. *T. leutescens* (LAY et BENNETT)	2
108. *T. amblycephala* (BLEEKER)	2
109. *Pteragogus flagellifera* (CUVIER et VALENCIENNES)	6
110. *Hemigymnus fasciatus* (BLOCH)	2
111. *H. melapterus* (BLOCH)	2
112. *Labropsis manabei* SCHMIDT	2
113. *Labroides bicolor* FOWLER et BEAN	2
114. *L. dimidiatus* CUVIER et VALENCIENNES	2
115. *Stethojulis bandanensis* (BLEEKER)	2
116. *S. trilineata* (BLOCH et SCHNEIDER)	2
117. *Macropharyngodon meleagris* (CUVIER et VALENCIENNES)	2
118. *Halichoeres trimaculatus* (QUOY et GAIMARD)	2
119. *H. centiquadrus* (LACÉPÈDE)	2
120. *H. marginatus* RÜPPELL	2
121. *H. margaritaceus* (CUVIER et VALENCIENNES)	2

TABLE 1. (continued).

Family and species	Ecological category
122. *H. kawarin* BLEEKER	2
123. *H. kallochroma* (BLEEKER)	2
124. *Coris variegata* (RÜPPELL)	2
125. *C. aygula* LACÉPÈDE	2
126. *C. gaimardi* (QUOY et GAIMARD)	2
127. *Cirrilabrus exquistis* SMITH	2
128. *C. cyanopleura* (BLEEKER)	2
129. *Hemipteronotus* sp.	2
130. *Pseudochelinus hexataenia* (BLEEKER)	2
131. *Chelinus rhodochronus* GÜNTHER	2
Pomacanthidae	
132. *Pomacanthus imperator* (BLOCH)	2
133. *Pygoplites diacanthus* (BODDAERT)	2
134. *Centropyge vrolicki* (BLEEKER)	2
135. *C. multispinis* (PLAYFAIR)	2
Chaetodontidae	
136. *Chaetodon trifascialis* (QUOY et GAIMARD)	2
137. *C. auriga* FORSSKÅL	2
138. *C. vagabundus* LINNAEUS	2
139. *C. xanthurus* DESJARDINS	2
140. *C. ornatissimus* CUVIER et VALENCIENNES	2
141. *C. melanotus* BLOCH et SCHNEIDER	2
142. *C. lunula* (LACÉPÈDE)	2
143. *C. citrinellus* CUVIER et VALENCIENNES	2
144. *C. kleini* BLOCH	2
145. *C. punctatofasciatus* CUVIER	2
146. *C. baronessa* CUVIER	2
147. *Hemitaurichthys polylepis* BLEEKER	2
148. *Heniochus chrysostomus* CUVIER et VALENCIENNES	2
Zanclidae	
149. *Zancleus cornutus* (LINNAEUS)	2
Acanthuridae	
150. *Acanthurus japonicus* SCHMIDT	2
151. *A. sandviscens* JENKINS	2
152. *A. olivaceus* BLOCH et SCHNEIDER	2
153. *Zebrasoma scopus* (BENNETT)	2
154. *Ctenochaetus striatus* (QUOY et GAIMARD)	2
155. *Naso lituratus* (BLOCH et SCHNEIDER)	2
Siganidae	
156. *Siganus spinus* (LINNAEUS)	2
Balistidae	
157. *Melichthys vidua* (SOLANDER)	2
158. *Balistoides conspicillum* (BLOCH et SCHNEIDER)	2
159. *Balistapus undulatus* (MUNGO PARK)	2
160. *Rhinecanthus aculeatus* (LINNAEUS)	2
161. *R. rectangulus* (BLOCH & SCHNEIDER)	2

TABLE 1. (continued).

Family and species	Ecological category
Tetradontidae	
162. *Canthigaster bennetti* (BLEEKER)	4
163. *Tetradon nigropunctatus* (BLOCH et SCHNEIDER)	4
Scorpaenidae	
164. *Scorpaenodes guamensis* (QUOY et GAIMARD)	4
165. *Scorpaena albobrunnea* GÜNTHER	4
166. *S.* sp.	4
167. *Pterois volitans* LINNAEUS	5
168. *Dendorochirus zebra* (QUOY et GAIMARD)	5
Scariidae	
169. *Cetoscarus bicolor* (RÜPPELL)	2
170. *Scarus scaber* CUVIER et VALENCIENNES	2
171. *S.* sp. A	2
172. *S.* sp. B	2
173. *S.* sp. C	2

species, there gives the ecological category, after a modification of Vivien's definition[9]. According to the species composition, Labridae, which consisted of 37 species and occupied 21.4% of the total fishes recorded was the most dominant family in the fish community at this area. It was followed by Pomacentridae (33 species, 19.1%) and Chaetodontidae (13 species, 7.5%) in order.

With regard to the work upon which this note is based, limitations should be noted, thus all observations refer to daytime only, and the observation in intertidal zone is carried out during low tide period. Furthermore, without extensive poisoning, some crepuscular fishes such as apogonid and blenniid are so secretive that they were not amenable to observation.

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太平島近岸魚類

張崑雄　詹榮桂　花長生

本快報係報告作者等於1981年1月赴南沙羣島中的太平島調查該地魚類相的部分結果。

經以水肺潛水 (SCUBA) 調查該島南方面積約 800 平方公尺的海域，共記錄 33 科 173 種魚類。其中，隆頭魚科 (Labridae) 爲魚種數最多之一科 (37 種，21.4%)。其次爲雀鯛科 (Pomacentridae) (33 種，19.1%)、蝶魚科 (Chaetodontidae) (13 種，7.5%)。

並將實地觀察到的每一種魚依據其生態行爲分成七種類別刋佈。