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APPENDIX

APPENDIX B

Frequency of Two-FAP sequences of *Alpheus djiboutensis* which living in association with *Cryptocentrus singaporensis*. Forty alpheid shrimps were observed, observation time, for each shrimp was 20 (a: Two -FAP sequences, b : No of shrimp, shrimp No.3, 11 and 26 stayed in the burrow all the observation time.

a \ b																																											Total	relative
	1	2	6	7	8	9	10	12	13	14	15	16	17	18	19	20	21	22	23	24	25	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42							
1. D-I	5	2	3	3	12	1	2	1	0	2	0	2	1	0	1	0	1	0	1	0	4	0	0	5	0	2	2	6	1	0	1	11	0	0	5	4	0	78	2.76					
2. D-M	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0.11			
3. D-P	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.11				
4. D-S	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.11				
5. E-D	5	2	2	1	2	0	3	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	3	0	1	0	3	0	0	0	6	0	0	3	2	0	37	1.31						
6. E-I	0	2	1	2	1	2	6	0	6	4	1	11	0	0	1	0	5	2	3	3	6	2	2	4	1	6	2	6	6	3	1	6	1	0	6	4	1	106	3.75					
7. E-M	6	0	2	1	13	6	2	1	1	3	1	2	1	0	16	5	4	0	2	0	5	6	3	14	3	4	0	14	4	0	15	6	0	0	8	3	0	151	5.34					
8. E-P	32	19	22	16	6	8	26	26	4	2	32	8	30	9	8	27	15	19	6	22	26	3	50	20	15	6	38	14	8	0	6	7	1	11	22	4	0	570	10.15					
9. E-S	1	0	2	2	1	3	1	0	1	0	8	11	0	0	0	0	5	1	2	10	1	10	3	7	1	3	0	0	0	0	1	0	0	5	0	0	73	2.58						
10. F-I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
11. I-E	43	22	29	21	22	18	37	27	11	8	41	31	31	8	24	32	29	25	12	30	35	19	25	47	19	18	42	35	17	2	21	26	1	10	43	12	0	873	30.86					
12. I-P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	5	0	29	1	0	0	0	0	0	0	0	0	0	0	0	0	0	40	1.41					
13. I-M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	14	0.49				
14. M-D	1	0	1	0	10	0	0	0	0	2	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	1	2	0	0	0	0	0	0	0					
15. M-E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
16. M-F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2	0	133	4.70				
17. M-I	6	0	1	1	2	5	2	2	1	1	1	1	1	0	15	5	5	1	1	0	4	5	6	13	3	4	1	11	4	0	13	5	0	0	0	0	1	0.04						
18. M-P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0.28					
19. M-S	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.04					
20. P-P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	14	0.49				
21. P-D	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4	0	1	0	0	1	0	0	0	0	0	1	0.04					
22. P-E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0.28					
23. P-M	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	0	0	1	1	11	16	4	0	505	17.85					
24. P-I	24	18	22	14	6	7	25	26	4	1	29	4	30	9	8	27	13	19	5	14	25	3	40	16	15	4	3	14	7	0	6	5	0	0	4	0	0	58	2.05					
25. P-S	9	1	0	1	0	1	1	0	0	1	3	4	0	0	0	3	5	0	8	3	0	6	3	0	2	3	0	0	0	0	0	0	0	0	0	0	0	10	0.35					
26. S-D	0	1	0	1	0	1	1	0	0	0	0	1	0	0	0	1	0	1	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0.08					
27. S-E	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0					
28. S-F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	128	4.52				
29. S-I	9	1	2	2	1	4	2	0	1	1	12	15	0	0	0	6	5	3	18	3	10	8	10	1	3	3	0	0	0	0	1	0	0	2	0	0	7	0.25						
30. S-M	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.04					
31. S-P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.04					

Total 2829

VITA



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- Manthachitra, V., 1986. Associative Behaviour between gobiid fish *Cryptocentrus singaporensis* (Herre) and alpheid shrimp, *Alpheus djiboutensis* De Man Paper presented at the 3rd Nat. Mar. Sci. Seminar, Nat. Res. Council of Thailand (abstract)
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