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## APPENDIX I

Genotypes of three microsatellite in juvenile *Chelonia mydas* from two geographic areas

Individual	locus Cm3	locus Cm72	locus Cc117
GU9	154/154	278/282	240/252
GU12	154/162	270/278	250/260
GU13	151/151	229/251	240/244
GU14	164/166	280/280	240/254
GU15	154/172	260/260	244/264
GU16	162/162	230/274	234/34
GU17	160/174	289/289	234/234
GU26	158/158	278/288	242/242
GU27	154/158	278/288	241/241
GU28	154/164	278/288	241/241
GU29	148/154	255/267	252/260
GU30	146/160	284/288	241/241
GU31	156/158	280/280	241/241
GU32	162/164	271/281	250/258
GU33	162/164	271/281	234/242
GU35	162/166	282/288	240/246

Individual	locus Cm3	locus Cm72	locus Cc117
GU36	162/174	248/260	242/238
GU37	154/154	251/293	236/246
GU38	154/168	250/250	236/242
GU39	160/160	242/246	244/248
GU41	150/174	250/296	240/242
GU42	172/174	260/270	238/246
GU43	166/174	278/284	240/240
GU44	162/176	250/266	242/242
GU45	160/182	242/246	-
GU46	162/182	240/244	240/246
GU47	162/172	254/256	236/240
GU48	162/172	-	232/246
GU49	151/155	282/284	244/246
GU50	150/154	248/254	238/262
GU51	164/182	244/262	244/244
GU52	150/162	286/280	248/256
GU53	150/178	288/294	240/252
GU54	160/174	282/292	240/246
GU55	151/163	254/256	-
GU56	160/174	282/286	246/268

<b>Individual</b>	<b>locus Cm3</b>	<b>locus Cm72</b>	<b>locus Cc117</b>
GU57	150/164	282/286	-
GU58	173/175	-	-
GU59	152/180	277/289	240/240
GU60	174/176	282/286	240/240
GU61	163/167	244/246	234/242
GU62	150/174	244/246	242/250
GU64	172/172	-	-
GU65	160/172	248/262	242/256
GU66	158/170	260/290	240/242
GU67	172/172	280/296	240/242
GU68	158/174	249/273	252/256
GU69	164/174	256/282	-
GU70	158/172	252/272	-
GU71	160/160	278/298	236/260
GU72	151/151	-	-
GU73	154/172	268/268	244/256
GU74	166/174	248/280	-
GU75	166/174	248/272	-
GU76	150/174	248/248	-
GU77	147/161	272/292	254/254
GU78	165/173	274/286	252/252

Individual	locus Cm3	locus Cm72	locus Cc117
GU79	150/154	272/272	-
GU80	156/174	252/278	240/260
GU81	160/172	240/282	238/238
GU82	-	-	254/260
GU83	150/162	248/298	250/250
GU84	166/180	252/284	238/244
GU85	170/172	240/248	244/244
GU86	166/170	244/298	240/246
GU87	144/162	230/278	238/258
GU88	164/170	270/286	246/246
GU89	160/162	256/256	-
GU90	168/174	254/278	244/250
GU91	168/174	298/298	238/250
GU92	174/174	276/284	240/256
GU93	160/176	288/288	240/240
GU94	152/160	276/284	238/238
GU95	174/178	280/296	246/246
GU96	154/166	276/284	240/242
GU97	174/174	252/272	250/252
GU98	159/159	250/278	240/240

<b>Individual</b>	<b>locus Cm3</b>	<b>locus Cm72</b>	<b>locus Cc117</b>
GU99	155/163	239/239	238/240
GU100	155/181	278/290	252/254
GU101	172/176	284/288	232/242
GU102	162/174	254/294	236/236
GU103	164/174	270/276	240/246
GU104	150/166	270/276	240/240
GU105	158/172	264/272	240/242
GU106	162/172	270/278	240/258
GU107	156/178	270/282	242/246
GU108	146/164	246/280	240/246
GU109	154/174	272/272	250/252
GU110	152/162	280/280	242/246
GU111	160/162	280/280	240/246
GU112	168/182	246/248	242/250
GU113	162/176	244/292	248/248

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## APPENDIX II

Table I Allele frequencies distribution of 20 individuals adult *C. mydas* analysed by three microsatellite loci (Cm3, Cm72 and Cc117) in the Andaman Sea and the Gulf of Thailand samples

Individual	locus Cm3	locus Cm72	locus Cc117
GU1	150/162	286/290	240/246
GU2	160/174	254/278	240/240
GU3	162/182	258/262	234/252
GU4	164/174	246/254	240/268
GU5	161/173	280/284	240/246
GU6	150/174	230/246	248/256
GU7	151/161	244/248	234/240
GU8	159/161	262/262	254/256
GU10	174/180	286/290	234/244
GU11	158/162	262/284	240/244
GU18	158/172	270/288	242/242
GU19	155/159	286/290	240/250
GU20	160/160	242/242	244/246
GU21	149/179	254/276	242/254
GU22	177/179	261/283	242/240
GU23	177/179	261/283	240/242
GU24	162/164	250/282	240/254
GU25	174/182	282/288	242/246

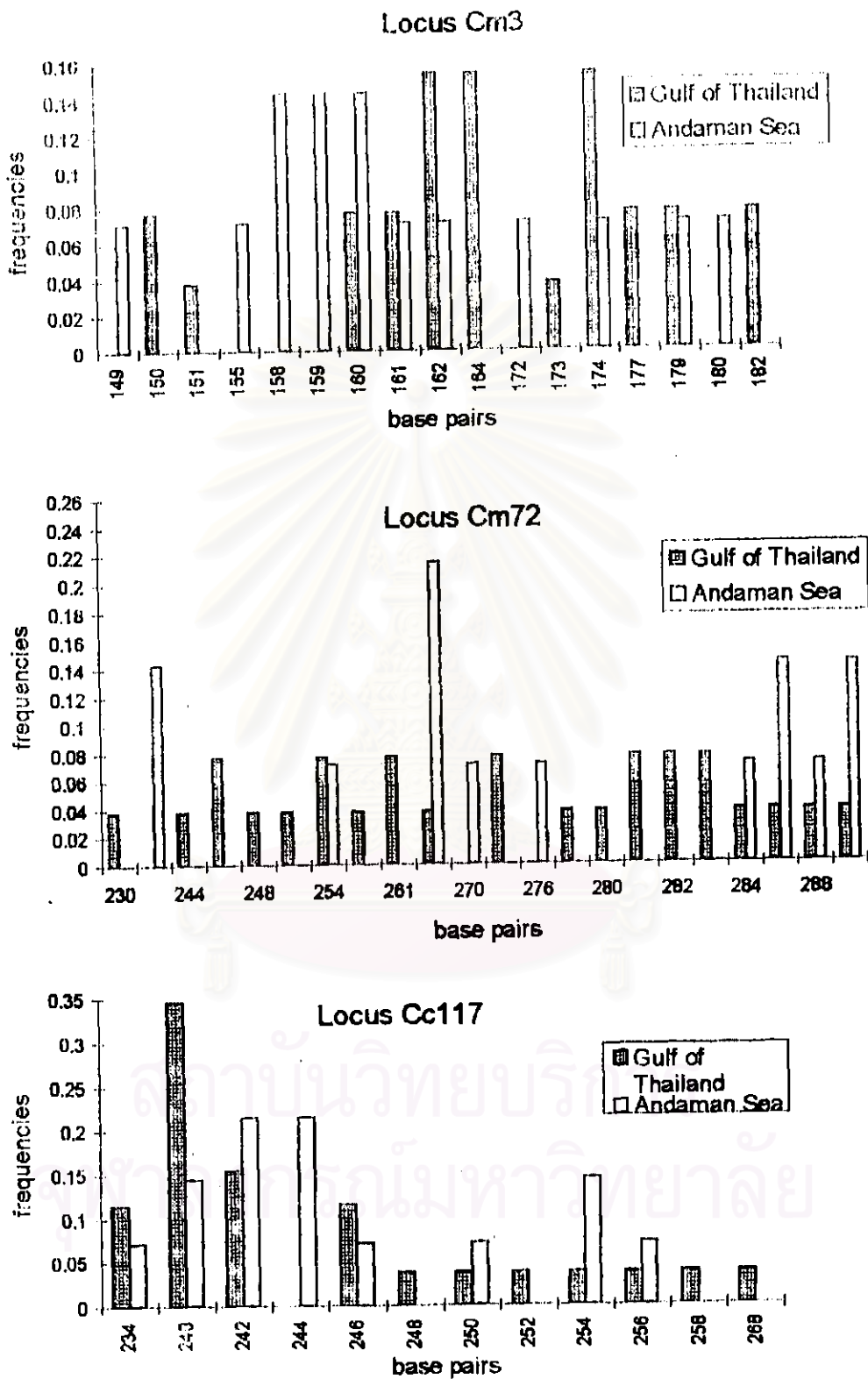
Table II Sample size ( $N$ ), number of alleles per locus ( $A$ ), observed heterozygosity ( $H_o$ ), expected heterozygosity ( $H_e$ ) and fixation indexed ( $F$ ) at three loci for two *C. mydas* populations.

Locus	Gulf of Thailand	Andaman Sea	Total
$N$	13	7	20
<b>Cm3</b>			
$A$	11	11	17
$H_o$	1.00	0.86	0.95
$H_e$	0.93	0.92	0.93
$F$	-	-	0.065
<b>Cm72</b>			
$A$	19	9	22
$H_o$	1.00	0.71	0.90
$H_e$	0.95	0.	0.90
$F$	-	-	0.105
<b>Cc117</b>			
$A$	11	8	12
$H_o$	0.91	0.86	0.90
$H_e$	0.90	0.88	0.89
$F$	-	-	0.169

Table III Hardy-Weinberg expectation, pairwise comparisons of genotypic equilibrium between Cm3, Cm72 and Cc117 loci observed in 20 adult *C. mydas*

Locus	Gulf of Thailand	Andaman Sea
Cm3	0.0765	0.2452
Cm72	0.0469	0.0111
Cc117	0.8534	0.6727
overall	0.0721	0.0497

at 95% C.I.



Histogram showing allele frequencies of three microsatellite loci (Cm3, Cm72 and Cc117) in two populations (the Gulf of Thailand and the Andaman Sea) of adult *C. mydas*



Table IV Results of tests for heterogeneity in adult *C. mydas* among two populations.

Sampling groups compared and locus	$F_{ST}$	$F_{ST}$ P- value	Monte Carlo P-value
Cm3	0.0104	0.0232	0.0283
Cm72	0.0091	0.2888	0.2949
Cc117	0.0120	0.2746	0.4531
overall	0.0108	0.2546	0.1736

at 95% C.I.

Table V Pairwise comparisons of genotypic disequilibrium between Cm3, Cm72 and Cc117 loci observed in 20 adult *C. mydas*

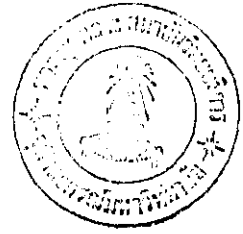
Locus pair	P-value
Cm3&Cm72	0.00080
Cm3&Cc117	0.09976
Cm72&Cc117	0.05175

at 95% C.I.

Table VI Genetic distance between the Andaman Sea and the Gulf of Thailand samples computed from three loci of 20 adult *C. mydas*

Locus	genetic distance
Cm3, Cm72 and Cc117	0.6946
Cm3, Cm72	0.9913
Cm3	0.8794

## Biography



Miss Thanaporn Veerapraditsin was born on November 4, 1972 in Bangkok. She graduated with the degree of Bachelor of Science from the Department of Science at Chulalongkorn University in 1993. In 1995, she has studies in Master degree of Science at the Department of Biotechnology, Chulalongkorn University.

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