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## **APPENDIX**

**Table 1A** Collection of *Xestospongia* sp. in semi-dried weight (mg) during August 2005 to July 2006

Month	Colony 1 (mg)	Colony 2 (mg)	Colony 3 (mg)
August	504.7	506.3	502.9
September	509.1	506.3	508.6
October	504.2	514.9	502.8
November	523.8	520.9	545.5
December	529.8	517.5	523.8
January	515.8	509.6	520.1
February	521.7	515.3	510.1
March	522.9	527.0	524.3
April	537.4	514.2	540.7
May	520.2	512.6	512.0
June	526.0	534.0	534.3
July	522.0	513.8	512.4

**Table 2A** Environment parameters and renieramycin M (RM) quantity during August 2005 to July 2006.

No.	Month	Replicate	pH	salinity (ppt)	Temp (°C)	TDS mg/L	TSS mg/L	Chlorophyll (mg/m <sup>3</sup> )			RM (%w/w)
								Chl a	Chl b	Chl c	
1	August	1	8.45	30	31	34.92	7.01	3.89	0.33	1.45	0.13
	August	2	8.46	30	31	34.92	7.01	4.25	0.17	1.40	0.11
	August	3	8.47	30	32	34.92	7.01	4.05	0.57	1.32	0.11
2	September	1	8.30	31	30	32.93	10.69	13.51	-0.41	3.97	0.16
	September	2	8.28	31	30	32.93	10.69	13.02	-0.72	3.54	0.16
	September	3	8.31	31	30	32.93	10.69	12.64	-0.28	3.84	0.12
3	October	1	8.38	32	30	38.04	10.03	7.5	-0.08	2.93	0.18
	October	2	8.36	33	31	38.04	10.03	5.62	0.03	2.08	0.24
	October	3	8.34	32	29	38.04	10.03	6.28	0.25	2.49	0.17
4	November	1	8.30	27	32	31.00	8.93	1.65	0.52	1.39	0.15
	November	2	8.32	28	31	31.00	8.93	1.5	0.33	1.16	0.10
	November	3	8.34	28	31	31.00	8.93	1.83	0.44	1.36	0.11
5	December	1	8.00	33	25	34.89	15.77	2.63	1.18	1.88	0.15
	December	2	8.02	34	26	34.89	15.77	2.5	0.71	1.4	0.11
	December	3	8.04	33	25	34.89	15.77	3.49	1.01	2.38	0.16
6	January	1	8.42	33	28	37.28	11.73	2.55	1.92	3.38	0.07
	January	2	8.38	33	29	37.28	11.73	1.61	1.07	1.89	0.07
	January	3	8.41	32	28	37.28	11.73	1.74	1.54	2.38	0.10
7	February	1	8.40	34	26	38.89	13.8	1.61	1.07	1.89	0.13
	February	2	8.36	33	28	38.89	13.8	0.97	0.61	0.86	0.13
	February	3	8.39	34	27	38.89	13.8	1.45	0.92	1.30	0.14

Table 2A (continued).

No.	Month	Replicate	pH	salinity (ppt)	Temp (°C)	TDS mg/L	TSS mg/L	Chlorophyll (mg/m <sup>3</sup> )			RM (%w/w)
								Chl a	Chl b	Chl c	
8	March	1	8.10	34	30	37.74	11.9	3.69	0.73	1.37	0.12
	March	2	8.08	33	31	37.74	11.9	3.67	0.96	1.99	0.11
	March	3	8.12	33	30	37.74	11.9	3.97	1.35	2.44	0.11
9	April	1	8.10	33	31	37.68	8.8	4.25	0.13	1.77	0.24
	April	2	8.13	34	30	37.68	8.8	3.61	-0.37	1.11	0.20
	April	3	8.12	33	31	37.68	8.8	4.2	0.64	2.65	0.15
10	May	1	8.22	33	30	33.12	11.7	4.46	1.70	2.51	0.15
	May	2	8.23	34	30	33.12	11.7	4.99	1.45	2.43	0.09
	May	3	8.21	35	30	33.12	11.7	4.81	1.46	3.19	0.14
11	June	1	8.30	29	29	31.19	8.3	2.35	2.36	2.92	0.13
	June	2	8.28	30	29	31.19	8.3	3.19	0.78	0.45	0.09
	June	3	8.27	30	28	31.19	8.3	3.70	0.85	0.26	0.12
12	July	1	8.20	30	30	30.93	10.01	2.87	0.23	1.46	0.11
	July	2	8.18	29	30	30.93	10.01	3.34	0.89	1.42	0.06
	July	3	8.22	31	29	30.93	10.01	3.21	0.38	1.30	0.10

**Table 3A** Statistical analysis of renieramycin M annual content (from August 2005 to July 2006) using one-way ANOVA and multiple comparison (Tukey).

### ANOVA

Renieramycin M

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.043	11	0.004	5.764	0.000
Within Groups	0.016	24	0.001		
Total	0.059	35			

### Multiple Comparisons

Dependent Variable: RM  
Tukey HSD

MONTH (I)	MONTH (J)	Mean Difference (I-J)	Std. Error	Sig.
January	FEB	-0.053333	0.0211695	0.374
	MAR	-0.033333	0.0211695	0.902
	APR	-0.116667(*)	0.0211695	0.001
	MAY	-0.046667	0.0211695	0.562
	JUN	-0.033333	0.0211695	0.902
	JUL	-0.010000	0.0211695	1.000
	AUG	-0.036667	0.0211695	0.837
	SEP	-0.066667	0.0211695	0.128
	OCT	-0.116667(*)	0.0211695	0.001
	NOV	-0.040000	0.0211695	0.754
	DEC	-0.060000	0.0211695	0.227
	February	JAN	0.053333	0.0211695
MAR		0.020000	0.0211695	0.998
APR		-0.063333	0.0211695	0.172
MAY		0.006667	0.0211695	1.000
JUN		0.020000	0.0211695	0.998
JUL		0.043333	0.0211695	0.660
AUG		0.016667	0.0211695	1.000
SEP		-0.013333	0.0211695	1.000
OCT		-0.063333	0.0211695	0.172
NOV		0.013333	0.0211695	1.000
DEC		-0.006667	0.0211695	1.000
March		JAN	0.033333	0.0211695
	FEB	-0.020000	0.0211695	0.998
	APR	-0.083333(*)	0.0211695	0.024
	MAY	-0.013333	0.0211695	1.000
	JUN	0.000000	0.0211695	1.000
	JUL	0.023333	0.0211695	0.992
	AUG	-0.003333	0.0211695	1.000
	SEP	-0.033333	0.0211695	0.902
	OCT	-0.083333(*)	0.0211695	0.024
	NOV	-0.006667	0.0211695	1.000
	DEC	-0.026667	0.0211695	0.977

MONTH (I)	MONTH (J)	Mean Difference (I-J)	Std. Error	Sig.
April	JAN	0.116667(*)	0.0211695	0.001
	FEB	0.063333	0.0211695	0.172
	MAR	0.083333(*)	0.0211695	0.024
	MAY	0.070000	0.0211695	0.093
	JUN	0.083333(*)	0.0211695	0.024
	JUL	0.106667(*)	0.0211695	0.002
	AUG	0.080000(*)	0.0211695	0.034
	SEP	0.050000	0.0211695	0.465
	OCT	0.000000	0.0211695	1.000
	NOV	0.076667(*)	0.0211695	0.048
	DEC	0.056667	0.0211695	0.295
	MAY	JAN	0.046667	0.0211695
FEB		-0.006667	0.0211695	1.000
MAR		0.013333	0.0211695	1.000
APR		-0.070000	0.0211695	0.093
JUN		0.013333	0.0211695	1.000
JUL		0.036667	0.0211695	0.837
AUG		0.010000	0.0211695	1.000
SEP		-0.020000	0.0211695	0.998
OCT		-0.070000	0.0211695	0.093
NOV		0.006667	0.0211695	1.000
DEC		-0.013333	0.0211695	1.000
JUN		JAN	0.033333	0.0211695
	FEB	-0.020000	0.0211695	0.998
	MAR	0.000000	0.0211695	1.000
	APR	-0.083333(*)	0.0211695	0.024
	MAY	-0.013333	0.0211695	1.000
	JUL	0.023333	0.0211695	0.992
	AUG	-0.003333	0.0211695	1.000
	SEP	-0.033333	0.0211695	0.902
	OCT	-0.083333(*)	0.0211695	0.024
	NOV	-0.006667	0.0211695	1.000
	DEC	-0.026667	0.0211695	0.977
	JUL	JAN	0.010000	0.0211695
FEB		-0.043333	0.0211695	0.660
MAR		-0.023333	0.0211695	0.992
APR		-0.106667(*)	0.0211695	0.002
MAY		-0.036667	0.0211695	0.837
JUN		-0.023333	0.0211695	0.992
AUG		-0.026667	0.0211695	0.977
SEP		-0.056667	0.0211695	0.295
OCT		-0.106667(*)	0.0211695	0.002
NOV		-0.030000	0.0211695	0.948
DEC		-0.050000	0.0211695	0.465
AUG		JAN	0.036667	0.0211695
	FEB	-0.016667	0.0211695	1.000
	MAR	0.003333	0.0211695	1.000
	APR	-0.080000(*)	0.0211695	0.034
	MAY	-0.010000	0.0211695	1.000
	JUN	0.003333	0.0211695	1.000
	JUL	0.026667	0.0211695	0.977
	SEP	-0.030000	0.0211695	0.948

MONTH (I)	MONTH (J)	Mean Difference (I-J)	Std. Error	Sig.
	OCT	-0.080000(*)	0.0211695	0.034
	NOV	-0.003333	0.0211695	1.000
	DEC	-0.023333	0.0211695	0.992
SEP	JAN	0.066667	0.0211695	0.128
	FEB	0.013333	0.0211695	1.000
	MAR	0.033333	0.0211695	0.902
	APR	-0.050000	0.0211695	0.465
	MAY	0.020000	0.0211695	0.998
	JUN	0.033333	0.0211695	0.902
	JUL	0.056667	0.0211695	0.295
	AUG	0.030000	0.0211695	0.948
	OCT	-0.050000	0.0211695	0.465
	NOV	0.026667	0.0211695	0.977
	DEC	0.006667	0.0211695	1.000
OCT	JAN	0.116667(*)	0.0211695	0.001
	FEB	0.063333	0.0211695	0.172
	MAR	0.083333(*)	0.0211695	0.024
	APR	0.000000	0.0211695	1.000
	MAY	0.070000	0.0211695	0.093
	JUN	0.083333(*)	0.0211695	0.024
	JUL	0.106667(*)	0.0211695	0.002
	AUG	0.080000(*)	0.0211695	0.034
	SEP	0.050000	0.0211695	0.465
	NOV	0.076667(*)	0.0211695	0.048
	DEC	0.056667	0.0211695	0.295
NOV	JAN	0.040000	0.0211695	0.754
	FEB	-0.013333	0.0211695	1.000
	MAR	0.006667	0.0211695	1.000
	APR	-0.076667(*)	0.0211695	0.048
	MAY	-0.006667	0.0211695	1.000
	JUN	0.006667	0.0211695	1.000
	JUL	0.030000	0.0211695	0.948
	AUG	0.003333	0.0211695	1.000
	SEP	-0.026667	0.0211695	0.977
	OCT	-0.076667(*)	0.0211695	0.048
	DEC	-0.020000	0.0211695	0.998
DEC	JAN	0.060000	0.0211695	0.227
	FEB	0.006667	0.0211695	1.000
	MAR	0.026667	0.0211695	0.977
	APR	-0.056667	0.0211695	0.295
	MAY	0.013333	0.0211695	1.000
	JUN	0.026667	0.0211695	0.977
	JUL	0.050000	0.0211695	0.465
	AUG	0.023333	0.0211695	0.992
	SEP	-0.006667	0.0211695	1.000
	OCT	-0.056667	0.0211695	0.295
	NOV	0.020000	0.0211695	0.998

\* The mean difference is significant at the 0.05 level.

## VITA

Miss Supaporn Bunsiriluck was born on June 6, 1977 in Ratchaburi Province, Thailand. She received her Bachelor Degree of Science in Pharmacy in 2001 from the Faculty of Pharmaceutical Sciences, Mahidol University, Bangkok, Thailand. Since 2001 she has been working as a staff member at the Sirindhorn Public Health College, Ubonratchathani Province, Thailand.