



ภาคผนวก

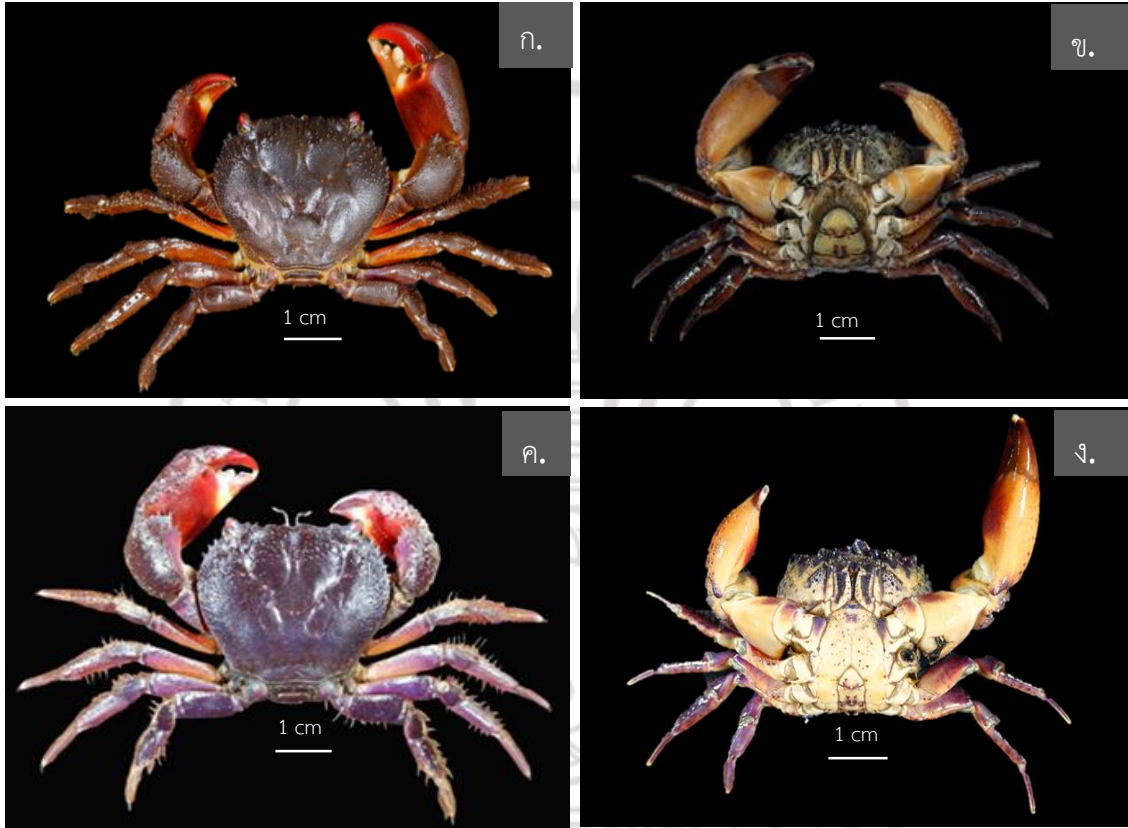
ลิขสิทธิ์ของมหาวิทยาลัยราชภัฏรำไพพรรณี

ภาคผนวกที่ 1 ภาพปูในวงศ์ Menippidae

ภาพที่ 1 (ก.-ข.) ด้านหน้าและด้านหลังของปูใบ้ก้ามโต (*Myomenippe hardwickii*)

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ภาคผนวกที่ 1 ภาพปูในวงศ์ Eriphiidae



ภาพที่ 2 (ก.-ข.) ด้านหน้าและด้านหลังของปูใบ้ตาแดง (*Eriphia ferox*)
 (ค.-ง.) ด้านหน้าและด้านหลังของปูใบ้ตาแดง (*Eriphia sebana*)

ภาคผนวกที่ 1 ภาพปูในวงศ์ Xanthidae



ภาพที่ 3 (ก.-ข.) ด้านหน้าและด้านหลังของปูใบ้หลังเต่า (*Atergatis integerrimus*)
 (ค.-ง.) ด้านหน้าและด้านหลังของปูใบ้ลายแผนที่ (*Atergatis floridus*)

ภาคผนวกที่ 1 ภาพปูในวงศ์ Xanthidae (ต่อ)



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ภาพที่ 4 (ก.-ข.), (ค.-ง.), (จ.-ฉ) ด้านหน้าและด้านหลังของปูใบ้ (*Leptodius nigromaculatus*)

ภาคผนวกที่ 1 ภาพปูในวงศ์ Oziidae



ภาพที่ 5 (ก.-ข.) ด้านหน้าและด้านหลังของปูใบ้ท้องลายจุด (*Ozius guttatus*)
 (ค.-ง.) ด้านหน้าและด้านหลังของปูใบ้ก้ามซ้อน (*Ozius rugulosus*)
 (จ.-ฉ.) ด้านหน้าและด้านหลังของปูใบ้ก้ามเรียว (*Epixanthus frontalis*)

ภาคผนวกที่ 2 การทดสอบความแตกต่างของประชากรปูใบไม้ในแต่ละระบบนิเวศ บริเวณเกาะนมสาว จังหวัดจันทบุรี

ANOVA

species

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	97.475	1	97.475	13.986	.000
Within Groups	3638.058	522	6.969		
Total	3735.532	523			

ภาคผนวกที่ 3 การทดสอบความแตกต่างของประชากรปูใบไม้ในแต่ละเดือน บริเวณเกาะนมสาว จังหวัดจันทบุรี

ANOVA

species

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	653.490	8	81.686	13.650	.000
Within Groups	3082.042	515	5.985		
Total	3735.532	523			

ลิขสิทธิ์ของมหาวิทยาลัยราชภัฏรำไพพรรณี

ภาคผนวกที่ 4 การทดสอบความสัมพันธ์ระหว่างความชุกชุมของปูใบกับปัจจัยกายภาพ บริเวณเกาะนมสาว จังหวัดจันทบุรี

		month	ecosystem	crab	mutecrab	depth	turbidity	salty	pH	DO	watertemperature	airtempeature	ligthintensity
month	Pearson Correlation	1	.000	-.139	-.023	.100	.031	-.161	-.621(**)	.403(*)	-.213	-.043	-.173
	Sig. (2-tailed)		1.000	.419	.892	.561	.855	.350	.000	.015	.212	.805	.313
	N	36	36	36		36	36	36	36	36	36	36	36
ecosystem	Pearson Correlation	.000	1	-.147	-.148	.819(**)	.061	.013	.322	.138	.124	-.049	.158
	Sig. (2-tailed)	1.000		.394	.388	.000	.723	.940	.055	.424	.472	.775	.359
	N	36	36	36	36	36	36	36	36	36	36	36	36
crab	Pearson Correlation	-.139	-.147	1	.835(**)	-.236	.365(*)	-.136	.040	-.326	-.069	-.004	-.114
	Sig. (2-tailed)	.419	.394		.000	.167	.029	.430	.816	.052	.689	.980	.509
	N	36	36	36	36	36	36	36	36	36	36	36	36
mutecrab	Pearson Correlation	-.023	-.148	.835(*)	1	-.238	.612(**)	-.281	.066	-.216	-.192	-.015	-.207
	Sig. (2-tailed)	.892	.388	.000		.163	.000	.097	.700	.205	.263	.932	.225
	N	36	36	36	36	36	36	36	36	36	36	36	36
depth	Pearson Correlation	.100	.819(**)	-.236	-.238	1	.044	.199	.194	.424(**)	.036	-.082	.140
	Sig. (2-tailed)	.561	.000	.167	.163		.797	.245	.258	.010	.835	.637	.416
	N	36	36	36	36	36	36	36	36	36	36	36	36
turbidity	Pearson Correlation	.031	.061	.365(*)	.612(**)	.044	1	-.411(*)	.205	-.202	.044	-.022	-.068
	Sig. (2-tailed)	.855	.723	.029	.000	.797		.013	.231	.237	.800	.898	.693
	N	36	36	36	36	36	36	36	36	36	36	36	36

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).



ภาคผนวกที่ 4 การทดสอบความสัมพันธ์ระหว่างความชุกชุมของปูใบกับปัจจัยกายภาพ บริเวณเกาะนมสาว จังหวัดจันทบุรี (ต่อ)

		month	ecosystem	crab	mutecrab	depth	turbidity	salty	pH	DO	watertemperature	airtempeature	lighthintensity
salty	Pearson												
	Correlation	-.161	.013	-.136	-.281	.199	-.411(*)	1	-.080	.258	-.086	-.206	-.073
	Sig. (2-tailed)	.350	.940	.430	.097	.245	.013		.642	.128	.618	.227	.673
pH	N	36	36	36	36	36	36	36	36	36	36	36	36
	Pearson												
	Correlation	-.621(**)	.322	.040	.066	.194	.205	-.080	1	-.449(**)	.289	-.271	.577(**)
DO	Sig. (2-tailed)	.000	.055	.816	.700	.258	.231	.642		.006	.088	.110	.000
	N	36	36	36	36	36	36	36	36	36	36	36	36
	Pearson												
watertemperat ure	Correlation	.403(*)	.138	-.326	-.216	.424(**)	-.202	.258	-.449(**)	1	-.472(**)	.040	-.270
	Sig. (2-tailed)	.015	.424	.052	.205	.010	.237	.128	.006		.004	.818	.112
	N	36	36	36	36	36	36	36	36	36	36	36	36
airtempeature	Pearson												
	Correlation	-.213	.124	-.069	-.192	.036	.044	-.086	.289	-.472(**)	1	.185	.194
	Sig. (2-tailed)	.212	.472	.689	.263	.835	.800	.618	.088	.004		.280	.258
lighthintensity	N	36	36	36	36	36	36	36	36	36	36	36	36
	Pearson												
	Correlation	-.043	-.049	-.004	-.015	-.082	-.022	-.206	-.271	.040	.185	1	-.584(**)
airtempeature	Sig. (2-tailed)	.805	.775	.980	.932	.637	.898	.227	.110	.818	.280		.000
	N	36	36	36	36	36	36	36	36	36	36	36	36
	Pearson												
lighthintensity	Correlation	-.173	.158	-.114	-.207	.140	-.068	-.073	.577(**)	-.270	.194	-.584(**)	1
	Sig. (2-tailed)	.313	.359	.509	.225	.416	.693	.673	.000	.112	.258	.000	
	N	36	36	36	36	36	36	36	36	36	36	36	36

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

ภาคผนวกที่ 5 ตัวอย่างลำดับนิวคลีโอไทด์บางส่วนของยีน COI ของตัวอย่างปูใบที่ใช้ในการศึกษาครั้งนี้

NS_C01_Ozius_guttatus	ATAGTAGGAACCTCACTAAGATTAATTATCCGGTCCCGAACTAGGTCAACCCGGGAACCCCTAATCGGCAATGACCAAATTTATAACGTTAGTAGTTACAGCCCATGCTTTCGTAATGATTTTTTTTATAGTTA
NS_C02_Eriphia_ferox	.....T.....C.....T.A.....T.....T.....T.....G.....C.....T.....C.A.....C.....A.....C.....C.....C.....
NS_C03_Ozius_guttatus	.....T.....C.....T.A.....T.....T.....T.....T.....T.....G.....C.....T.....C.A.....C.....A.....C.....C.....C.....
NS_C06_Myomenippe_hardwickii	.....T.....C.....T.A.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C07_Atergatis_integerrimus	.....C.....T.....C.....C.....C.....T.....T.....T.....T.....A.....T.....T.....T.....T.....C.....C.....T.....T.....A.....T.....T.....T.....A.....C.....
NS_C16_Ozius_rugulosus	.....C.....T.....C.....T.....T.....T.....A.....T.....T.....T.....A.....T.....T.....T.....C.....C.....T.....A.....C.....C.....G.....A.....
NS_C19_Epixanthus_frontalis	.....G.....T.....C.....C.....C.....T.....C.....T.....T.....T.....T.....C.....T.....T.....C.....A.....C.....C.....G.....
NS_C20_Myomenippe_hardwickii	.....T.....C.....T.A.....T.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C22_Leptodius_nigromaculatus	.....T.....T.....TT.....T.....A.....T.....G.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....C.....T.....A.....C.....
NS_C23_Leptodius_nigromaculatus	.....T.....T.....TT.....T.....A.....T.....G.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....C.....T.....A.....C.....
NS_C24_Atergatis_integerrimus	.....C.....T.....C.....C.....C.....T.....T.....T.....T.....A.....T.....T.....T.....T.....C.....C.....T.....T.....A.....C.....
NS_C27_Leptodius_nigromaculatus	.....G.....T.....TT.....T.....A.....T.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....T.....C.....C.....T.....A.....C.....
NS_C28_Leptodius_nigromaculatus	.....T.....T.....TT.....T.....A.....T.....G.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....C.....T.....A.....C.....
NS_C33_Atergatis_floridus	.....T.....T.....C.....T.....T.....T.....A.....T.....A.....T.....T.....C.....C.....T.....T.....G.....T.....T.....T.....A.....C.....
NS_C36_Myomenippe_hardwickii	.....T.....T.....C.....T.....A.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C44_Leptodius_nigromaculatus	.....T.....T.....TT.....T.....A.....T.....G.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....C.....T.....A.....C.....
NS_C45_Ozius_guttatus	.....T.....T.....TT.....T.....A.....T.....G.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....C.....T.....A.....C.....
NS_C46_Leptodius_nigromaculatus	.....T.....T.....TT.....T.....A.....T.....G.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....C.....T.....A.....C.....
NS_C48_Atergatis_integerrimus	.....G.....C.....T.....C.....C.....C.....T.....T.....T.....T.....A.....T.....T.....T.....T.....C.....C.....T.....T.....A.....C.....
NS_C49_Myomenippe_hardwickii	.....T.....T.....C.....C.....T.....A.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C52_Epixanthus_frontalis	.....G.....T.....C.....C.....C.....T.....T.....T.....T.....C.....G.....T.....T.....C.....A.....C.....C.....G.....
NS_C53_Leptodius_nigromaculatus	.....T.....T.....TT.....T.....A.....T.....G.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....C.....T.....A.....C.....
NS_C54_Leptodius_nigromaculatus	.....T.....T.....TT.....T.....A.....T.....G.....C.....A.....AT.....T.....T.....C.....C.....T.....C.....C.....T.....A.....C.....
NS_C58_Epixanthus_frontalis	.....G.....T.....C.....C.....C.....T.....T.....T.....T.....C.....G.....T.....T.....C.....A.....C.....C.....G.....
NS_C64_Atergatis_integerrimus	.....C.....T.....C.....C.....C.....T.....T.....T.....T.....A.....T.....T.....T.....T.....C.....C.....T.....T.....A.....T.....T.....A.....C.....
NS_C67_Myomenippe_hardwickii	.....T.....T.....C.....T.....A.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C68_Myomenippe_hardwickii	.....T.....T.....C.....T.....A.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C77_Ozius_guttatus	.....T.....T.....C.....T.....A.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C78_Ozius_guttatus	.....T.....T.....C.....T.....A.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C79_Ozius_guttatus	.....T.....T.....C.....T.....A.....T.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C69_Myomenippe_hardwickii	.....T.....C.....T.A.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C70_Myomenippe_hardwickii	.....T.....C.....T.A.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C71_Myomenippe_hardwickii	.....T.....C.....T.A.....T.....T.....T.....T.....T.....A.....C.....T.....C.....T.....T.....C.....T.....A.....C.....
NS_C72_Atergatis_integerrimus	.....G.....C.....T.....C.....C.....C.....T.....T.....T.....A.....T.....T.....T.....T.....C.....C.....T.....T.....A.....C.....
NS_C73_Atergatis_integerrimus	.....G.....C.....T.....C.....C.....C.....T.....T.....T.....A.....T.....T.....T.....T.....C.....C.....T.....T.....A.....C.....
NS_C74_Atergatis_integerrimus	.....C.....T.....C.....C.....C.....T.....T.....T.....A.....T.....T.....T.....T.....C.....C.....T.....T.....A..... Activate Windows