

ความหลากหลายของชนิดปูน้ำเค็มบริเวณชายฝั่งทะเลภาคตะวันออก ในเขตจังหวัด ชลบุรี

Species Diversity of Marine Crabs in Eastern Sea Coast, Chonburi Province

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บทคัดย่อ

การศึกษาความหลากหลายของชนิดและการแพร่กระจายของปูน้ำเค็มในบริเวณชายฝั่งทะเลภาคตะวันออก ในเขตอำเภอเมือง อำเภอศรีราชาและอำเภอสัตหีบ จังหวัดชลบุรี ในระหว่างเดือนมกราคม พ.ศ. 2552 ถึงเดือน ธันวาคม พ.ศ. 2555 ผลการศึกษาพบปูน้ำเค็ม 9 วงศ์ (Family Dromiidae, Majidae, Dorippidae, Calappidae, Leucosiidae, Parthenopidae, Portunidae, Xanthidae และ Menippidae) 41 ชนิด คือ *Lauridromia indica*, *Composcia retusa*, *Doclea rissoni*, *D. tetraptera*, *Hyastenus diacanthus*, *Micippa thalia*, *Phalangipus filiformis*, *Dorippe tenuipes*, *Dorippoides facchino*, *Calappa philargius*, *Calappa clypeata*, *Ashtoret lunaris*, *Matuta victor*, *Arcania novemspinosa*, *Ixa cylindrus*, *Seulocia vittata*, *Leucosia anatum*, *Cryptopodia fornicata*, *Rhinolambrus longispinus*, *Parthenope longimanus*, *Scylla serrata*, *Portunus pelagicus*, *P. sanguinolentus*, *P. gladiator*, *P. hastatoides*, *P. tenuipes*, *P. tweediei*, *Charybdis feriata*, *C. affinis*, *C. hellerii*, *C. natator*, *C. truncata*, *C. variegata*, *Thalamita crenata*, *Podophthalmus vigil*, *Demania scaberrima*, *Galene bispinosa*, *Halimede ochtodes*, *Lophozozymus pictor*, *Pilumnus minutus* และ *Menippe rumphii*

คำสำคัญ: ปูน้ำเค็ม ชายฝั่งทะเลภาคตะวันออก ความหลากหลายของชนิด

Abstract

Species diversity and distribution of marine crabs were studied along Eastern sea coast in Muang, Si Racha, and Sattahip Districts, Chonburi Province during January 2009 to December 2012. Forty-one species in 9 families of marine crabs were found (Family Dromiidae, Majidae, Dorippidae, Calappidae, Leucosiidae, Parthenopidae, Portunidae, Xanthidae, and Menippidae) including *Lauridromia indica*, *Composcia retusa*, *Doclea rissoni*, *D. tetraptera*, *Hyastenus diacanthus*, *Micippa thalia*, *Phalangipus filiformis*,

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Dorippe tenuipes, *Dorippoides facchino*, *Calappa philargius*, *C. clypeata*, *Ashtoret lunaris*, *Matuta victor*, *Arcania novemspinosa*, *Ixa cylindrus*, *Seulocia vittata*, *Leucosia anatum*, *Cryptopodia fornicata*, *Rhinolambrus longispinus*, *Parthenope longimanus*, *Scylla serrata*, *Portunus pelagicus*, *P. sanguinolentus*, *P. gladiator*, *P. hastatoides*, *P. tenuipes*, *P. tweediei*, *Charybdis feriata*, *C. affinis*, *C. hellerii*, *C. natator*, *C. truncata*, *C. variegata*, *Thalamita crenata*, *Podophthalmus vigil*, *Demania scaberrima*, *Galene bispinosa*, *Halimede ochtodes*, *Lophozozymus pictor*, *Pilumnus minutus*, and *Menippe rumphii*.

Keyword: marine crab, Eastern sea coast, species diversity

Introduction

Marine crabs are the invertebrates which live in the sea coast area. Many species of marine crabs are the important protein-food sources and high economic value such as *Scylla serrata*, *Portunus pelagicus*, *P. sanguinolentus*, and *Charybdis feriata*. Some species of crabs can be served as food for animals.

In Thailand, Suvatti¹ reported 210 species of marine crabs, Rodmongkoldee, Lauhachinda² reported 74 species of marine crabs, which collected from the fisherman wharves in the Gulf of Thailand, as well as Khoyngam, Lauhachinda³ investigated 72 species of crabs from small-trawler catches. Naiyanetr⁴ reported 428 species of marine crabs in Thailand and Rodmongkoldee, Rodmongkoldee, Ogaddee, Rodmongkoldee⁵ reported 32 species in 9 families of marine crabs in Eastern sea coast, Rayong Province.

Species diversity and distribution of marine crabs in Eastern sea coast, Chonburi Province were studied by using local fishing gear, crab gill net, which have never been recorded. The results of research will useful for the natural

resource conservation and sustainable utilization by local community.

Objective

The objectives of this research were studied species diversity, and distribution of marine crabs in Eastern sea coast in Chonburi Province.

Materials and Methods

The specimens were collected from Eastern sea coast in Ang Sila and San Suk Subdistricts, Muang District, Si Racha Subdistrict, Si Racha District, as well as Samaesan Subdistrict, Sattahip District, Chonburi Province, by using crab gill net and trawl net, during January 2009 to December 2012. The specimens were cleaned and preserved in 10% formalin solution. They were deposited in the Science and Applied Science Center, Faculty of Science, Buriram Rajabhat University, Buriram Province. The specimens were identified by following Sakai⁶, Ai-yun, Si-liang⁷, Carpenter, Niem⁸, and Ng, Guinot, Davie⁹.



Figure 1 Wonnapha Beach, San Suk Subdistrict, Maung District, Chonburi Province.

Results

Forty-one species in 9 families of marine crabs were found (Family Dromiidae, Majidae, Dorippidae, Calappidae, Leucosiidae, Parthenopidae, Portunidae, Xanthidae, and Menippidae) including *Lauridromia indica*, *Composcia retusa*, *Doclea rissoni*, *D. tetraptera*, *Hyastenus diacanthus*, *Micippa thalia*, *Phalangipus filiformis*, *Dorippe tenuipes*, *Dorippoides facchino*, *Calappa philargius*, *C. clypeata*, *Ashtoret lunaris*, *Matuta victor*, *Arcania novemspinosa*, *Ixa cylindrus*, *Seulocia vittata*, *Leucosia anatum*, *Cryptopodia fornicata*, *Rhinolambrus longispinus*,

Parthenope longimanus, *Scylla serrata*, *Portunus pelagicus*, *P. sanguinolentus*, *P. gladiator*, *P. hastatoides*, *P. tenuipes*, *P. tweediei*, *Charybdis feriata*, *C. affinis*, *C. hellerii*, *C. natator*, *C. truncata*, *C. variegata*, *Thalamita crenata*, *Podophthalmus vigil*, *Demania scaberrima*, *Galene bispinosa*, *Halimede ochtodes*, *Lophozozymus pictor*, *Pilumnus minutus*, and *Menippe rumphii* (figure 2).

The classification, and abundance of marine crabs in Chonburi Province, which collected by using fishing gears, were showed in Table 1.

Table 1 The classification, and abundance of marine crabs in Chonburi Province, which collected by using fishing gears. Abbreviations were as follow: +++ = Abundant, ++ = common, + = rare.

Classification	Abundance	Crab gill net	Trawl net
Phylum Arthropoda			
Class Crustacea			
Order Decapoda			
Family Dromiidae			
<i>Lauridromia indica</i>	+++	/	/
Family Majidae			
<i>Composcia retusa</i>	+	/	
<i>Doclea rissoni</i>	++	/	/
<i>D. tetraptera</i>	++	/	/
<i>Hyastenus diacanthus</i>	+	/	
<i>Micippa thalia</i>	+	/	
<i>Phalangipus filiformis</i>	++		/
Family Dorippidae			
<i>Dorippe tenuipes</i>	+++	/	
<i>Dorippoides facchino</i>	+	/	/
Family Calappidae			
<i>Calappa philargius</i>	+	/	/
<i>C. clypeata</i>	+	/	/
<i>Ashtoret lunaris</i>	++	/	
<i>Matuta victor</i>	++	/	
Family Leucosiidae			
<i>Arcania novemspinosa</i>	++		/
<i>Ixa cylindrus</i>	+++		/
<i>Seulocia vittata</i>	+		/
<i>Leucosia anatum</i>	+		/
Family Parthenopidae			
<i>Cryptopodia fornicata</i>	+		/
<i>Rhinolambrus longispinus</i>	++	/	/
<i>Parthenope longimanus</i>	++	/	/
Family Portunidae			
<i>Scylla serrata</i>	++	/	/
<i>Portunus pelagicus</i>	+++	/	/
<i>P. sanguinolentus</i>	+	/	/
<i>P. gladiator</i>	++	/	/

Table 1 (cont.)

Classification	Abundance	Crab gill net	Trawl net
<i>P. hastatoides</i>	++		/
<i>P. tenuipes</i>	++	/	/
<i>P. tweediei</i>	++		/
<i>Charybdis feriata</i>	++	/	/
<i>C. affinis</i>	++	/	/
<i>C. hellerii</i>	++	/	
<i>C. natator</i>	++	/	
<i>C. truncata</i>	++		/
<i>C. variegata</i>	++		/
<i>Thalamita crenata</i>	++	/	
<i>Podophthalmus vigil</i>	++	/	/
Family Xanthidae			
<i>Demania scaberrima</i>	+	/	
<i>Galene bispinosa</i>	++	/	/
<i>Halimede ochtodes</i>	+	/	
<i>Lophozozymus pictor</i>	+	/	
<i>Pilumnus minutus</i>	+		/
Family Menippidae			
<i>Menippe rumphii</i>	++	/	



Figure 2 Marine crabs in Eastern sea coast, Chonburi Province.



Figure 2 Marine crabs in Eastern sea coast, Chonburi Province (cont.).

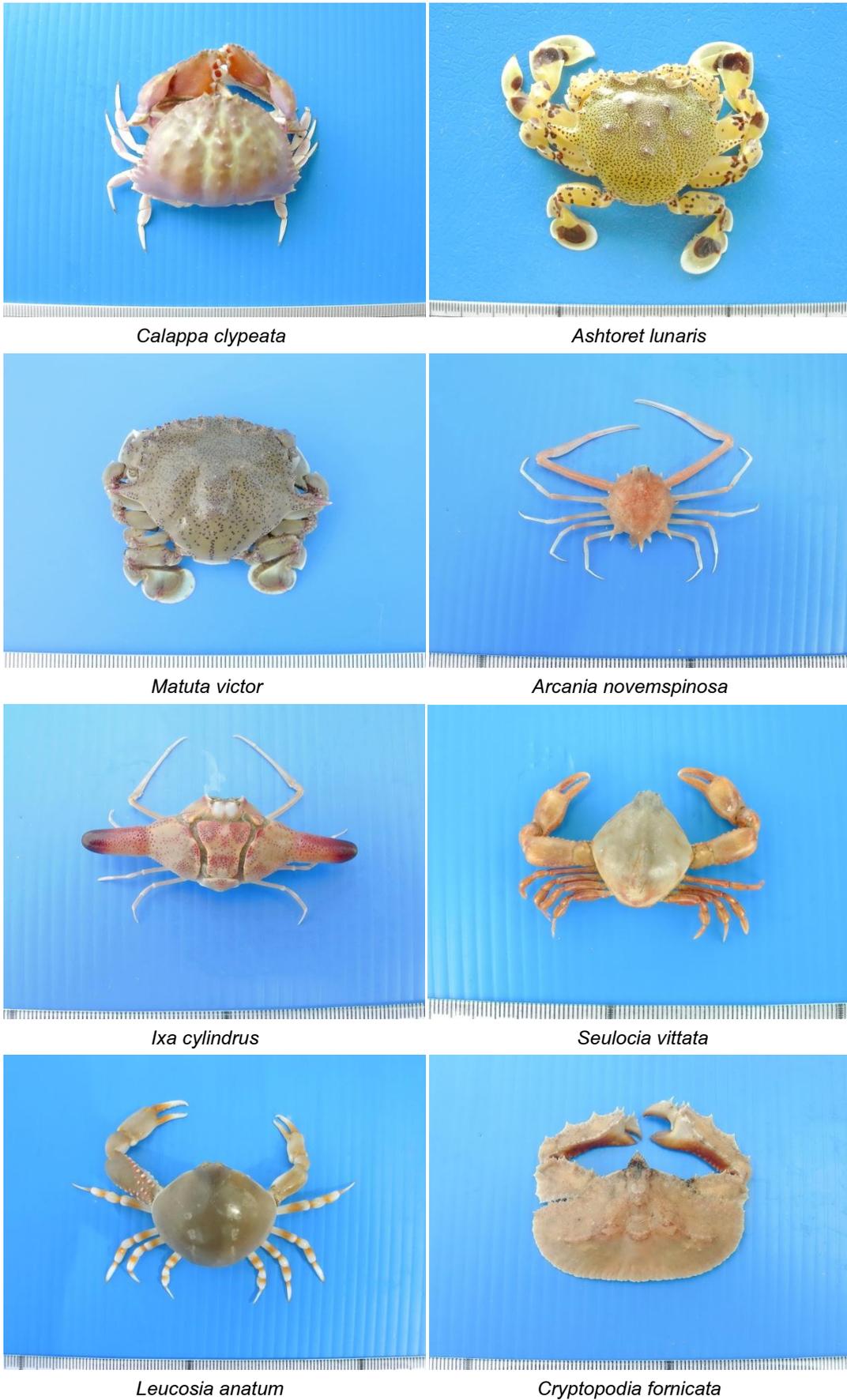


Figure 2 Marine crabs in Eastern sea coast, Chonburi Province (cont.).



Figure 2 Marine crabs in Eastern sea coast, Chonburi Province (cont.).

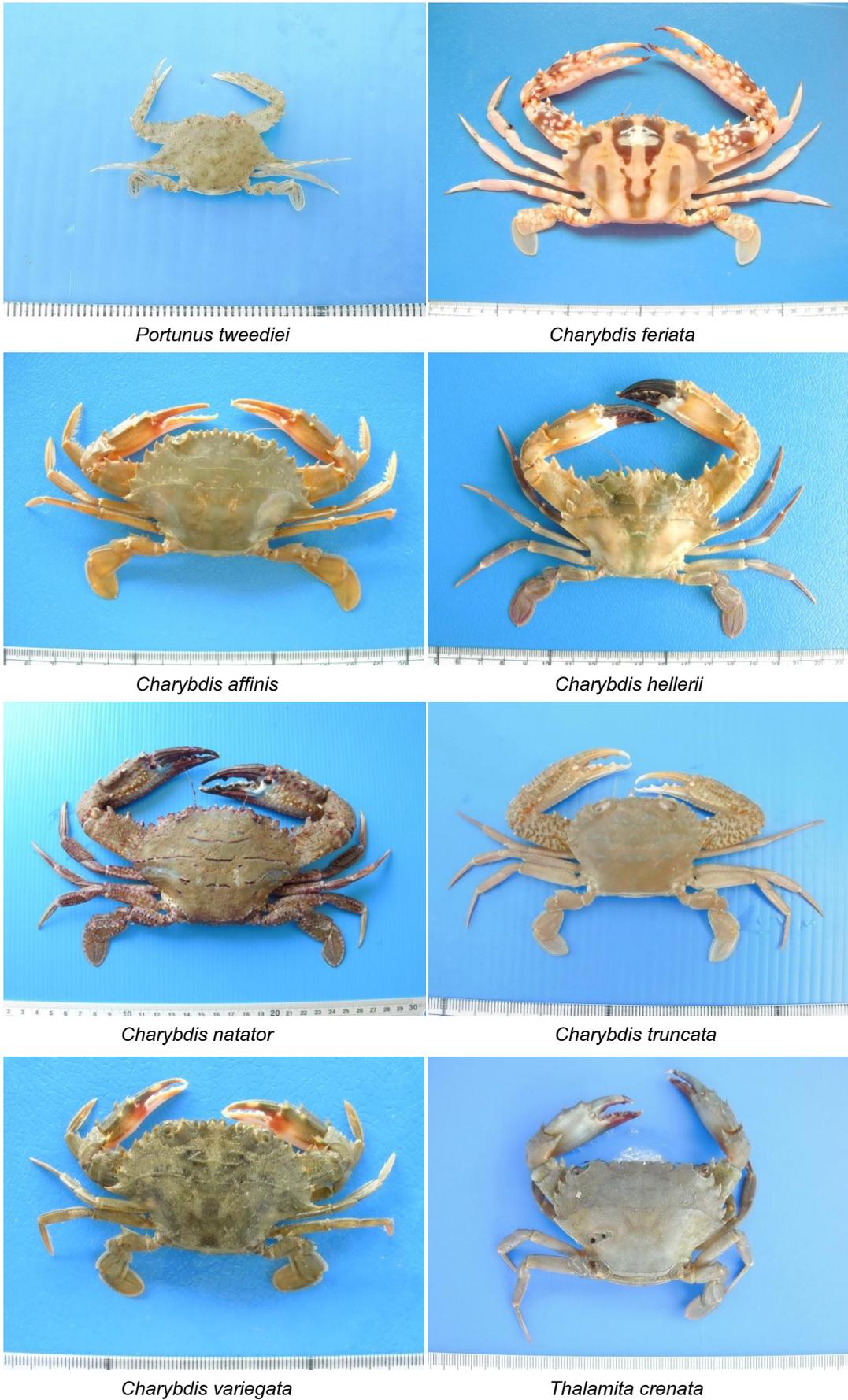


Figure 2 Marine crabs in Eastern sea coast, Chonburi Province (cont.).

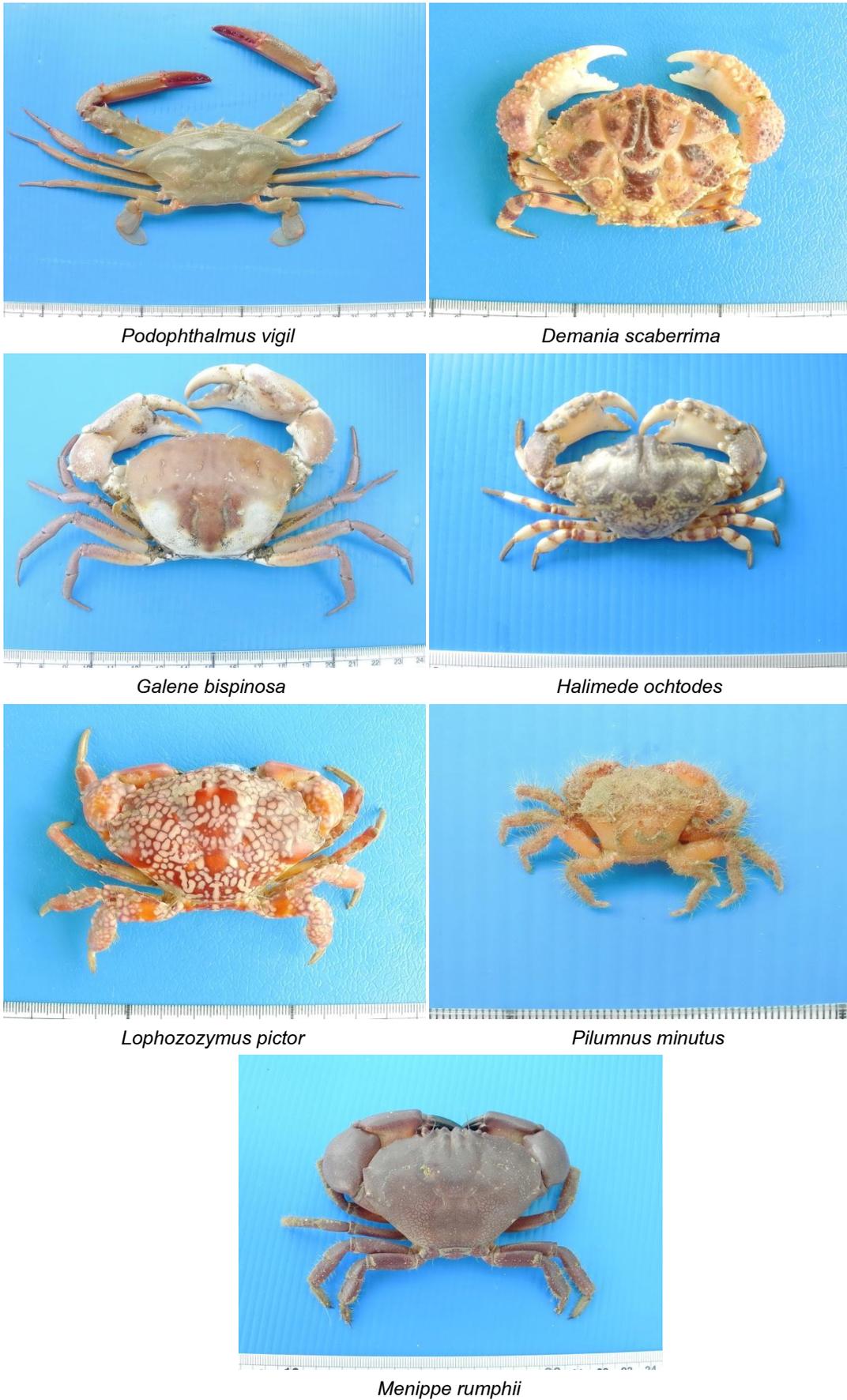


Figure 2 Marine crabs in Eastern sea coast, Chonburi Province (cont.).

Discussion and Conclusion

Forty-one species in 9 families of marine crabs were found (Family Dromiidae, Majidae, Dorippidae, Calappidae, Leucosiidae, Parthenopidae, Portunidae, Xanthidae, and Menippidae) including *Lauridromia indica*, *Composcia retusa*, *Doclea rissoni*, *D. tetraptera*, *Hyastenus diacanthus*, *Miccipa thalia*, *Phalangipus filiformis*, *Dorippe tenuipes*, *Dorippoides facchino*, *Calappa philargius*, *C. clypeata*, *Ashtoret lunaris*, *Matuta victor*, *Arcania novemspinosa*, *Ixa cylindrus*, *Seulocia vittata*, *Leucosia anatum*, *Cryptopodia fornicata*, *Rhinolambrus longispinus*, *Parthenope longimanus*, *Scylla serrata*, *Portunus pelagicus*, *P. sanguinolentus*, *P. gladiator*, *P. hastatooides*, *P. tenuipes*, *P. tweediei*, *Charybdis feriata*, *C. affinis*, *C. hellerii*, *C. natator*, *C. truncata*, *C. variegata*, *Thalamita crenata*, *Podophthalmus vigil*, *Demania scaberrima*, *Galene bispinosa*,

Halimede ochtodes, *Lophozozymus pictor*, *Pilumnus minutus*, and *Menippe rumphii*.

The abundant and widely distributed species were *Lauridromia indica*, *Dorippe tenuipes*, *Ixa cylindrus*, and *Portunus pelagicus*. Whereas, *Composcia retusa*, *Hyastenus diacanthus*, *Miccipa thalia*, *Dorippoides facchino*, *Calappa philargius*, *C. clypeata*, *Seulocia vittata*, *Leucosia anatum*, *Cryptopodia fornicata*, *Portunus sanguinolentus*, as well as the most of xanthid crabs were rarely found.

Seven species are new record for Chonburi Area comprises *Composcia retusa*, *Calappa philargius*, *Leucosia anatum*, *Portunus gladiator*, *Charybdis natator*, *C. variegata*, and *Menippe rumphii*.

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