RANGE EXTENSIONS FOR LOBSTERS OFF THE BRAZILIAN COAST (CRUSTACEA, DECAPODA, PALINURA, ASTACIDEA)

Paola Lupianhes Dall’Occo
Rodrigo Tadeu Bento
Gustavo Augusto Schmidt de Melo

ABSTRACT

Range extensions for six species of lobsters off the Brazilian coast is reported here. These include four species of the infraorder Palinura (Palinurellus gundlachi, Scyllarides brasiliensis, Scyllarus chacei and S. ramosae), and two species of the infraorder Astacidea (Nephropsis aculeata and N. rosea).

Keywords: Brazilian coast, distribution, Palinuridae, Scyllaridae, Nephropidae.

INTRODUCTION

Occurring in all the oceans, the lobsters are bentonic crustaceans that take refuge in cavities in the rocks and in coral reefs. Present along of the almost 9,000 kilometers of the Brazilian coast, lobsters represent an important parcel of the marine fauna and an excellent fisheries resource. The increasing anthropic interventions in the marine environment and the continuous exploiting pressure come threatening the rich biodiversity of the Brazilian territorial sea, being the studies that contemplate the increase of the knowledge on the fauna primordial for the elaboration of management and protection programs that aim to reduce the impacts in this ecosystem.

The registers for the range extensions were obtained through the revision of the carcinological collections of the Museu de Zoologia da Universidade de São Paulo (MZUSP), Museu Nacional do Rio de Janeiro (MNRJ) and Museu Professor Melo Leitão (MML), whose the most part of the specimens were collected under important projects (GEDIP, Ilha Grande, PADCT, REVIZEE, SOL and TAFF MD 55 “Marion Dufresne”) carried through the Brazilian coast.

According to DALL’OCCO (2005), the lobster fauna of Brazilian littoral is represented, at this moment, by 25 species, distributed in 2 infraorders, 6 families and 13 genera, as follow:

- Infraorder Palinura Latreille, 1820
  - Superfamily Palinuroidea Latreille, 1825
    - Family Palinuridae Latreille, 1802
      - Justitia longimanus (H. Milne Edwards, 1837)
      - Palinustus truncatus A. Milne-Edwards, 1880
      - Panulirus argus (Latreille, 1804)
      - Panulirus echinatus Smith, 1869
      - Panulirus laevicauda (Latreille, 1817)
    - Family Synaxidae Bate, 1881
      - Palinurellus gundlachi von Martens, 1878
  - Family Scyllaridae Latreille, 1825
    - Parribacus antarcticus (Lund, 1793)
    - Scyllarides brasiliensis Rathbun, 1906
    - Scyllarides deceptor Holthuis, 1963
    - Scyllarides delfosi Holthuis, 1960

1 Museu de Zoologia da Universidade de São Paulo – P.O. Box 42594, CEP 04299-970, São Paulo, SP, Brasil - E-mail: paolalupy@ig.com.br, canideos@yahoo.com.br, gasmelo@usp.br.
**RESULTS AND CONCLUSION**

*Palinurellus gundlachi* von Martens, 1878  
(Fig. 1)  
*Previous distribution:* Western Atlantic: Bermuda, southern Florida, Bahama Is., Yucatán, Caribbean Arc (from Cuba to Barbados), Curaçao and Brazil (Atol das Rocas and from Paraíba to Alagoas).  

*Material examined:* Espírito Santo - Ilha Escalvada, Guarapari, 20m, 1 female (MML 11).  

** MATERIAL AND METHODS **

The specimens were deposited in the carciological collections of the Museu de Zoologia da Universidade de São Paulo (MZUSP), Museu Nacional do Rio de Janeiro (MNRJ) and Museu Professor Melo Leitão (MML). The classification was based on the work of MARTIN; DAVIS (2001). Previous knowledge of the distributions was based on the reports of HOLTHUIS (1991), TAVARES (1997), SILVA et al. (1998) CINTRA et al. (1999), MELO (1999), SILVA; CALADO (2000) and TAVARES; YOUNG (2002). The material examined provided the new records listed below for each species.

The abbreviations used are: m, meters; proj., project; st., station. Table 1 and figures 1 to 6 show the previously known distribution of each species (black circles) and the present distribution (black squares).

**Material examined:** Santa Catarina - Ilha do Arvoredo, Praia do Farol, 19.x.2003, 1 female (MZUSP 16260).  

*Scyllarides brasiliensis* Rathbun, 1906  
(Fig. 2)  
*Previous distribution:* Western Atlantic: Brazil (Espírito Santo).  

*Material examined:* Bahia - REVIZEE Pesca - Bahia II, N/O “Thalassa”, st. E-0511, 15°42’S; 39°35’W, 251m, 2 males and 2 ovigerous females (MNRJ 1591).  

*Scyllarides brasiliensis* Tavares, 1988  
(Fig. 4)  
*Previous distribution:* Western Atlantic: Brazil (Espírito Santo).  

*Material examined:* Paraná – Proj. PADCT, st. 6633, 26°14’S; 45°44’W, 576m, 09.xii.1997, 1 female (MZUSP 12830); *Santa Catarina* - Proj. SOL, st. 1282, 25°58’S; 46°07’W, 268m, 07.xii.1970, 2 males and 5 females (MZUSP 11859); REVIZEE, st. 0412, São Francisco do Sul, 26°40’S; 46°34’W, 300m, 13.x.2001, 1 male (MZUSP 15186); “Nuevo Apenino”, 24.xi.2001, 2 females (MZUSP 15701) and (MZUSP 15702).  

*Nephropsis rosea* Bate, 1888  
(Fig. 6)  
*Previous distribution:* Western Atlantic: from Bermuda to French Guiana, including Gulf of Mexico and Caribbean Sea, Brazil (Pará and from Espírito Santo to São Paulo).  

*Material examined:* Rio de Janeiro – Niterói, 700-800m, x.2004, 4 males and 2 females (MZUSP 16299); Cabo Frio, 730-800m, i.2004, 2 males (MZUSP 16128); TAAF MD 55 Brésil, st. 4 CP 07, 21°31’S; 40°07’W, 7.50-7.85m, 10.v.1987, 2 females (MZUSP 16116) and (MZUSP 16114); st. 64 CP 105, 23°46’S; 42°10’W, 610m, 02.vi.1987, 1 female (MZUSP 16118) and 1 juvenile (MZUSP 16110); REVIZEE, st. 1256, Baia de Guanabara, 23°47’S; 42°09’W, 603m, 28.iv.2002, 1 male (MZUSP 15249); Proj. Ilha Grande, st. 1249, 24°02’S; 43°04’W, 600m, 26.iv.2002, 1 female (MZUSP 15253); *São Paulo* - REVIZEE, st. 1129, São Sebastião, 24°55’S; 44°33’W, 605-621m, 19.iv.2002, 2 males (MZUSP 15252); *Santa Catarina* - REVIZEE, st. 1001, 27°22’S; 47°01’W, 600m, 21.i.2002, 1 male (MZUSP 15250).  

In this work six species of lobsters have their limits in the Brazilian coast extended. The new occurrences are: *Palinurellus gundlachi* for Espírito Santo; *Scyllarides brasiliensis* for Santa Catarina; *Scyllarides chacei* for Espírito Santo; *S. ramosae* for Bahia;
Nephropsis aculeata for Paraná and Santa Catarina and N. rosea for Rio de Janeiro, São Paulo and Santa Catarina.

ACKNOWLEDGMENTS

We would like to thank Dr. Janet W. Reid for assistance with English text. GASM thanks to CNPq for support through grant number 303224/87-8.

REFERENCES


Table 1 - Previously known distribution of each species and the new occurrences.

<table>
<thead>
<tr>
<th>Species</th>
<th>Previous Distribution</th>
<th>New occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palinurellus gundlachi</td>
<td>Bermuda, southern Florida, Bahama Is., Yucatán, Caribbean Arc (from Cuba to Barbados), Curaçao and Brazil (Atol das Rochas and from Paraíba to Alagoas)</td>
<td>Espírito Santo</td>
</tr>
<tr>
<td>Scyllarides brasiensis</td>
<td>Brazil (from Maranhão to São Paulo)</td>
<td>Santa Catarina</td>
</tr>
<tr>
<td>Scyllarides chacei</td>
<td>North Carolina to Gulf of Mexico, Central America, Antilles, Venezuela, Surinam and Brazil (from Pará to Bahia and Rio de Janeiro)</td>
<td>Espírito Santo</td>
</tr>
<tr>
<td>Scyllarus ramosae</td>
<td>Brazil (Espírito Santo)</td>
<td>Bahia</td>
</tr>
<tr>
<td>Nephropsis aculeata</td>
<td>from New Jersey and Bermuda to French Guiana, including Gulf of Mexico and Caribbean Sea, Brazil (Pará and from Espírito Santo to São Paulo)</td>
<td>Paraná and Santa Catarina</td>
</tr>
<tr>
<td>Nephropsis rosea</td>
<td>from Bermuda to French Guiana, including Bahama Is., Gulf of Mexico, Caribbean Sea and Brazil (Amapá, Bahia and Espírito Santo)</td>
<td>Rio de Janeiro, São Paulo and Santa Catarina</td>
</tr>
</tbody>
</table>
Figura 1. Distribution of *Palinurellus gundlachi*. The previously known distribution show by circles and the present distribution by squares.

Figura 2. Distribution of *Scyllarides brasiliensis*. The previously known distribution show by circles and the present distribution by squares.
Figura 3. Distribution of *Scyllarus chacei*. The previously known distribution show by circles and the present distribution by squares.

Figura 4. Distribution of *Scyllarus ramosae*. The previously known distribution show by circles and the present distribution by squares.
Figura 5. Distribution of *Nephropsis aculeata*. The previously known distribution show by circles and the present distribution by squares.

Figura 6. Distribution of *Nephropsis rosea*. The previously known distribution show by circles and the present distribution by squares.