

NEW RECORD OF NANOSSESARMA Sarii (NADERLOO AND  
YURKAY, 2009) (CRUSTACEA: DECAPODA: BRACHYURA:  
SESARMIDAE) FROM KNOR AL-ZUBAIR, SOUTH OF IRAQ

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ABSTRACT

Specimens of the sesarmid crab *Nanosesarma sarii* (Naderloo and Türkay 2009) were collected from the intertidal zone of Khor Al-Zubair, Basrah, Iraq 2012 far from the Arabian Gulf coasts. Morphological features of this species are highlighted and a figure is provided.

Keywords: Sesarmid crab; *Nanosesarma sarii*; Brachyura; Khor Al-Zubair; Iraq

INTRODUCTION

*Nanosesarma sarii* was described by Naderloo and Türkay (2009) from the Arabian Gulf. Earlier records of the genus from the Arabian Gulf area was from Kuwait by Jones (1986) and Apel (2001) as *Nanosesarma minutum* De Man, 1887, while were referred to it as new species by Naderloo and Türkay (2009).

*Nanosesarma sarii* is the most common species in the intertidal zones of the Arabian Gulf, found in variety of habitats including rocky, cobble, oyster banks, muddy, and mangroves. *Nanosesarma jousseaumi* Nobili, 1905, is the only congener of the species known from the Arabian Gulf (Naderloo & Türkay, 2009; Naderloo 2011). This species is usually found sympatrically with *N. sarii* in the intertidal rocky/cobble habitat, but it was not found in the present studied area. The present paper deals with new record for Iraq of *Nanosesarma sarii* from Khor Al-Zubair far from the coast of the Arabian Gulf. It is the first report of this species outside the Arabian Gulf.

MATERIALS AND METHODS

The specimens were collected from Khor Al-Zubair (Fig. 1). The specimens were collected during low tide at the intertidal zone of Khor Al-Zubair, and crabs were picked up by hands. Some physico-chemical parameters recorded from the area on the Khor Al-Zubair during the collections made in January 2012 are: water temperature, 14°C; pH, 8.47; salinity, 24.7 psu; dissolved oxygen, 7.55 mg/L. Specimens were preserved in 96% alcohol and have been deposited in Marine Zoology, Forschungsinstitut Senckenberg, Germany and in the Marine Science Centre, University of Basrah, Iraq (MSC, 33).

STUDY AREA

Khor Al-Zubair is an extension of the Arabian Gulf waters in the lower reaches of Mesopotamia (Fig. 1) It has a length of approximate 42 km, and a width of 1km at low tide, with an average depth of 10-20 m. In 1983 this water body was connected to an oligohaline marsh (Hor Al-Hammar), by the Shatt Al-Basrah Canal changing the environment of lagoon of the Khor from a hypersaline to an estuary (Hussain and Ahmed, 1999). The topography of the Khor Al-Zubair looks like a spindle with tapering ends at the northern and southern ends.

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The northern end receives fresh water influx of average 700 m<sup>3</sup>/sec throughout the tidal cycle. The current in the Khor is characterized by one direction throughout the tidal cycle towards the southern end (Arabian Gulf), with velocity exceeding 2m/sec during ebb tide and 0.66 m/sec in flood tide. At the southern end, the water discharge reaches 10000m<sup>3</sup>/sec with velocity range of 0.8-5.78 m/sec and with big tidal range at the Umm-Qasar reaching 4.3m (Al-Badran *et al.*, 1996).

## RESULTS AND REMARKS

### **Sesarmidae**

*Nanosesarma* Tweedie, 1950

*Nanosesarma sarii* Naderloo & Türkay, 2009

(Figs. 1, 2, 3)

*Nanosesarma sarii* Naderloo & Türkay, 2009: 2912, figs. 1, 2, 3.

*Nanosesarma (Nanosesarma) minutum* Tirmizi & Ghani 1996: 159, figs. 61.

*Nanosesarma minutum* Jones 1986: 160, pl. 46

*Nanosesarma sarii* Naderloo 2011: 18, figs. 8a–g, 9a, 11a, 12a.

### MATERIAL EXAMINED (MSC, 33)

Carapace measurements are length × breadth respectively.

Three males (8.50×9.60 mm, 8.30 × 9.20 mm, 8.50 × 9.70 mm), all collected by second author Khalid Kh. Salih Al-Khafaji (Marine Science Centre) January 2012 from the intertidal zones of Khor Al-Zubair.

Carapace square (Fig. 2a), slightly broader than long (CB/CL = 1.12), convex, covered with short, plumose setae. Frontal edge sinuous, with 2 wide lobes, lobes convex, moderately produced. Regions well-defined, gastric region defined by deep groove; cardiac region with shallow groove. Anterolateral margin with 2 teeth including exorbital angle, first broadly triangular; second small triangular, with pointed tip, lateral margin behind second tooth slightly convergent (Fig. 2a).

Male abdomen (Fig. 2b) elongately triangular; sixth somite slightly more than twice as broad as long, lateral margins converging; telson markedly elongate, about 1.6 times as long as broad.

Chelipeds subequal; inner margin of merus proximally crenulated; manus slightly swollen, outer surface (Fig. 2c) with large patch of dense setae, covering whole manus above lower row of granules, extending to proximal half of fingers.

First male gonopod (Fig. 2d) nearly straight, corneous distal part slightly directed outwards, genital opening distally on posterior surface, corneous part completely covered with long setae.

### **Habitat**

*Nanosesarma sarii* was collected from Khor Al-Zubair, found under artificial stones (Fig. 3), some under decaying wood, or under old boats at the intertidal zone.

### **Geographical distribution**

Northwestern Indian Ocean, Arabian Gulf, Iran, Kuwait, Gulf of Oman and Iraq ( Khor Al-Zubair).

Naser, *et al.*

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#### FIGURE LEGEND

Fig1: Sampling site, indicating the position of the Khor Al-Zubair in the northern part of the Arabian Gulf.

Fig2: *Nanosesarma sarii* Naderloo & Türkay, 2009, male (♂.50 × 9.60): A, posterior view of whole crab, male; B, male ventral view; C, cheliped of male, outer surface; D, dorsal surface (first gonopod). Photos taken by Murtada.D.Naser, Marine Science Centre.

Fig 3: Habitat of *Nanosesarma sarii* Naderloo & Türkay, 2009.

New Record Of Nanosesarma Sari

Fig. 1



Naser, *et al.*

Fig. 2



New Record Of *Nanosesarma Sari*

Fig.3



Naser, *et al.*

*Bull. Iraq nat. Hist. Mus.*  
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تسجيل جديد لـ *Nanosesarma sarii*(Naderloo and Türkay 2009)  
من خور الزبير، جنوب العراق

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الخلاصه

جمعت نماذج من السرطان *Nanosesarma sarii*(Naderloo and Türkay 2009) من منطقة المد والجزر في خور الزبير، البصرة، العراق في ٢٠١٢ بعيداً عن سواحل الخليج العربي. والقي الضوء على الصفات المظهرية لهذا النوع المدروس ووضع صورة له.