

A new record of dotillid crab *Ilyoplax stevensi* Kemp, 1919 (Crustacea: Brachyura: Dotillidae Stimpson, 1858) from Shatt Al-Basrah Canal, Iraq

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Specimens of new record of dotillid crab *Ilyoplax stevensi* Kemp, 1919 were collected in January 2021 from intertidal zones of Shatt Al-Basrah Canal, Iraq. The diagnostic characteristics of these species were examined and are reported in the present paper.

Keywords: *Ilyoplax stevensi*, intertidal zones, Iraq

Introduction

The genus *Ilyoplax* (Stimpson 1858) currently consists of 28 species in the world. The genus species is widely distributed in the Indo-Western Pacific region (Davie, and Naruse, 2010; Fatemi, et al., 2011; Kitaura and Wada, 2006; Ng et al., 2008; Trivedi et al., 2015). In the Persian-Arabian Gulf, the genus *Ilyoplax* is represented by two species *Ilyoplax stevensi* (Kemp, 1919) and *Ilyoplax frater* (Kemp, 1919) (Fatemi, et al., 2011; Naderloo, 2017). Comprehensive taxonomic studies have been carried out on Brachyura of species in the Persian-Arabian Gulf, Iraqi coast in recent years such as: (Naser, 2009; Ng et al., 2009; Naser et al., 2010; Naser, 2011; Naser et al., 2012; Naser et al., 2013; Naser, 2018; Naser, 2019; Yasser & Naser, 2019, Yasser & Naser, 2019b).

The present study records significant expansion in the distribution range of the dotillid crab *Ilyoplax stevensi* in the Persian-Arabian Gulf, Iraqi coast.

Materials and methods

The Shatt Al-Basrah Canal emerges from the Euphrates River and empties into Khor Al-Zubair, an estuarine lagoon linked to the Persian-Arabian Gulf, located just west of Basrah town (Fig. 1); it is 37 km long and 59 m wide, with a range of between 5 and 7 m in depth (Naser et al., 2010).

The brachyuran crabs inhabiting the intertidal zone were collected during low tide from the muddy intertidal zone of Shatt Al-Basrah Canal northwest Persian-Arabian Gulf using hand picking method. The specimens were cleaned, photographed, preserved in 70% ethanol, and deposited in the Marine Science Centre (MSC), University of Basrah, Iraq. The size of the specimen was recorded in mm. Following abbreviations were used: CW: carapace width; CL: carapace length; G1: male first gonopod.

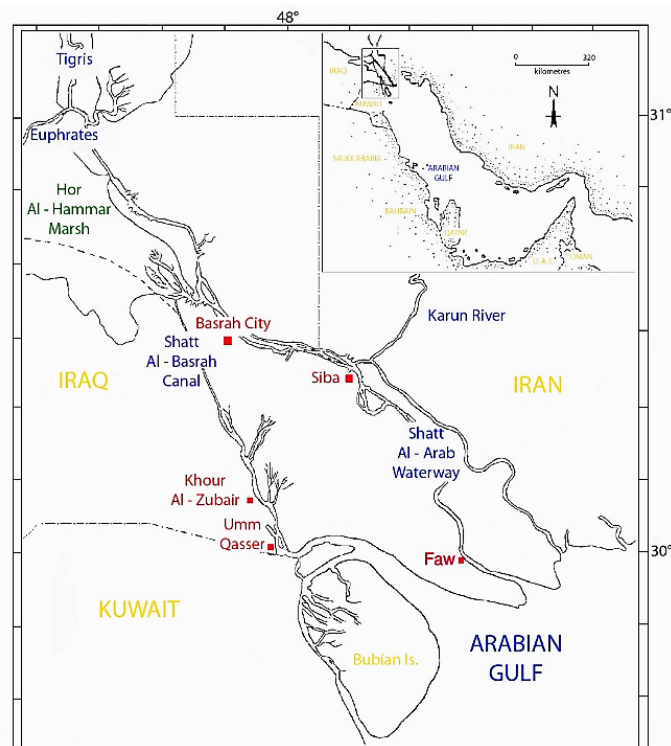


Fig. 1. Map of the Shatt Al-Basrah Canal at Basrah city, with the location of the sampling site.

Results and discussion

Ilyoplax stevensi (Kemp, 1919)

(Figs. 2 A-C, 3)

Material examined: 2 males and 1 female.

Diagnosis

Carapace rectangular, broader than long, smooth, regions not well defined. Carapace lateral borders straight, convex posteriorly. A branchial region with three rows of tubercles. The outer half of the orbit straight (Fig. 2A). Abdomen well segmented, the third and the fourth segments are the same breadth. The fifth segment is more than the half breadth of the fourth segment. The sixth segment is twice as broad as it is long (Fig. 2B). Male chelipeds are weak and slightly stouter than those of females. The palm is slender. The fingers are 1.4 times longer than the length of the upper border of the palm (Fig.2C). Male first gonopod G1 with apical part bent outward slightly 45 degrees (Fig.3). *Ilyoplax stevensi* is widely distributed in the Persian-Arabian Gulf. It has been recorded from Iran (Naderloo and Türkay, 2012), Kuwait (Jones, 1986), Saudi Arabia (Apel, 1994).

Ilyoplax stevensi can live on muddy substrates of the intertidal zones of the Shatt Al-Basrah Canal.



Fig. 2. *Ilyoplax stevensi* (Kemp, 1919). Male, CL = 6.2, CB = 9.3 mm, (A) dorsal view, (B) ventral view and (C) chelipeds.

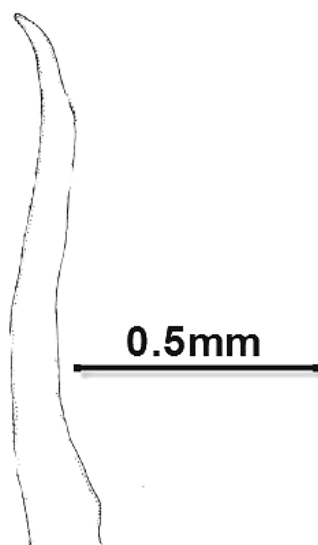


Fig.3. First male gonopod G1 of *Ilyoplax stevensi* Kemp, 1919.

Conflicts of interest

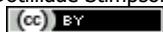
The authors declare no conflict of interest.

References

- Apel, M. (1994). Effects of the 1991 Gulf War oil spill on the crab fauna of intertidal mudflats in the western Arabian Gulf. *Cowier Forsch-Inst Senckenberg*, 166, 40–46.
- Davie, P.J.F., Naruse, T. (2010). A new species of *Ilyoplax* (Decapoda, Brachyura, Dotillidae) from Panglao, the Philippines. In Castro P, Davie PJF, Ng PKL, et al., editors. *Studies on Brachyura: a Homage to Danièle Guinot*. Crustaceana Monographs 11. Leiden: Brill. (pp. 75–82). <https://doi.org/10.1163/ej.9789004170865.i-366.54>
- Fatemi, S.M.R., Vosoughi, G.H., Valinasab, T., Savari, A., Ghotbeddin, N. (2011). First report of dotillid crabs (Decapoda, Brachyura) from the Northern Gulf of Oman, Iran. *Crustaceana*, 84, 1745–1753. <https://doi.org/10.1163/156854011X607079>
- Jones, D. A. (1986). A field guide to the sea shores of Kuwait and the Arabian Gulf.
- Kitaura, J., Wada, K. (2006). New species of *Ilyoplax* (Brachyura: Ocypodidae: Dotillinae) from the Philippines and Indonesia: behavioral, molecular, and morphological evidence. *Raffles Bulletin of Zoology*, 54, 373–379.
- Naderloo, R., Türkay, M. (2012). Decapod crustaceans of the littoral and shallow sublittoral Iranian coast of the Persian Gulf: faunistics, biodiversity and zoogeography. *Zootaxa*, 3374, 1–67. <https://doi.org/10.11646/zootaxa.3374.1.1>
- Naderloo, R. (2017). Atlas of Crabs of the Persian Gulf. In Atlas of Crabs of the Persian Gulf (1st ed. 20). <https://doi.org/10.1007/978-3-319-49374-9>
- Naser, M.D., White, K.N., Ali, M. H. (2010). *Grandidierella macronyx* Barnard, 1935 (Amphipoda, Aoridae): a new record from Shatt Al-Basrah, Basrah, Iraq. *Crustaceana*, 83, 1401–1407. <https://doi.org/10.1163/001121610X533511>
- Naser, M. (2009). First record of the freshwater crab, *Potamon mesopotamicum* brandis, storch & Türkay, 1998 (Decapoda, Brachyura, Potamidae) from the Al-Huwaizah marshes, Iraq. *Crustaceana*, 82(12), 1599–1602. <https://doi.org/10.1163/156854009X463874>
- Naser, M. (2011). The Sesarmid crab *Parasesarma persicum* Naderloo and Schubart, 2010 (Crustacea: Decapoda: Brachyura: Sesarmidae), New to the Iraqi Coastal Waters of Khor AlZubair and Shatt Al-Basrah Canal, Basrah, Iraq. *Jordan Journal of Biological Sciences*, 4(3), 185–190.
- Naser, M. (2018). A new record of *Eurycarcinus integrifrons* De Man, 1879 (Decapoda, Brachyura, Pilumnidae) from NW of the Persian – Arabian Gulf, Iraq. *Journal of Biological Studies*, 1(1), 9–13.
- Naser, M. (2019). A new record of *Eurycarcinus orientalis* A. Milne-Edwards, 1867 (Decapoda, Brachyura, Pilumnidae) from the north western part of the Persian-Arabian Gulf. *Journal of Biological Studies*, 1(4), 160–164.
- Naser, M., Ali, M., & Yasser, A. (2010). New record of the fiddler crab *Uca (Paraleptuca) sindensis* (Crustacea: Brachyura: Ocypodidae) from Khor Al-Zubair, Basrah, Iraq. *Marine Biodiversity Records*, 3, 1–3. <https://doi.org/10.1017/s1755267210000837>
- Naser, M., Page, T., Ng, N., M, A., Yasser, A, JM, B., PKL, N., & PF, C. (2012). Invasive records of *Eriocheir hepuensis* Dai, 1991 (Crustacea: Brachyura: Grapsoidea: Varunidae): Implications and taxonomic considerations. *BioInvasions Records*, 1(1), 71–86. <https://doi.org/10.3391/bir.2012.1.1.15>
- Naser MD, Alkhafaji KhS, Yasser AGh, D. Hs. (2013). New record of *Nanosesarma sarii* (Naderloo and Turkay, 2009) (Crustacea: Decapoda: Brachyura: Sesarmidae) from Khor Al-Zubair, south of Iraq. *Bull. Iraq Nat. Hist. Mus.*, 12(4), 35–41.
- Ng, P.K.L., Guinot, D., Davie, P. J. F. (2008). *Systema Brachyurorum: Part I. An annotated checklist of extant brachyuran crabs of the world*. *Raffles Bulletin of Zoology (Suppl)*, 17, 1–286.
- Ng, P.K.L., Rahayu, D., Naser, M. D. (2009). The Camptandriidae of Iraq, with description of a new genus and notes on, *Leptochryseus* Al-Khayat & Jones, 1996 (Crustacea: Decapoda: Brachyura). *Zootaxa*, 2312, 1–26. <https://doi.org/10.11646/zootaxa.2312.1.1>
- Trivedi, J., Soni, G., Trivedi, D., Vachhrajani, K. f. (2015). A new species of *Ilyoplax* (Decapoda, Brachyura, Dotillidae) from Gujarat, India. *Journal of Asia-Pacific Biodiversity*, 8, 173–177. <https://doi.org/10.1016/j.japb.2015.02.005>
- Yasser, A., & Naser, M. (2019a). First report of leucosiid crabs (Decapoda, Brachyura) from the Iraqi coast of the Persian Gulf. *Journal of Biological Studies*, 2(1), 25–30.
- Yasser, A., & Naser, M. D. (2019b). A new record of *Dorippe quadridens* (Fabricius, 1793) (Decapoda, Brachyura, Dorippidae) from the north western Persian-Arabian Gulf, Iraq. *Journal of Biological Studies*, 2(1), 1–3.

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