ECHINOIDEA OF PAKISTAN: CURRENT STATUS

Shahnawaz Gul

Jamia Millia Government Degree College, Shah Faisal Town, Karachi, Pakistan Correspondence- Email: gulshahnawaz@yahoo.com

ABSTRACT

This note provides current knowledge on diversity of echinoderm class Echinoidea in Pakistan. It is revealed that the echinoid fauna is scarcely known in the region with no study since nearly five decades. This report documents a record of a sea urchin, *Salmacis bicolor* in Pakistani waters after ninety-two years of Clark's (1925) first report from Karachi coast of Pakistan.

Key words: Echinodermata, Echinoidea, Temnopleuridae, diversity, Pakistan, Indo-west Pacific.

In Pakistan, echinoids (Echinodermata: Echinoidea) are unknown for nearly five decades. The echinoderm fauna compilations from Pakistan (Tahera, 1993; Tahera and Kazmi, 2005) mentioned four species of sea urchins: *Echinometra mathaei, Echinostrephus molaris, Stomopneustes variolaris* and *Temnopleurus toreumaticus*, and one of sand dollar, *Clypeaster rarispinus* reported in a single paper by Haque (1969). In addition, Clark (1925: 84-85) previously reported a regular sea urchin, *Salmacis bicolor* L. Agassiz in L. Agassiz & Desor, 1846 (Echinoidea: Temnopleuridae) from Karachi coast of Pakistan during working on catalogue of sea urchins in the British Museum (Natural History), London; the collection included 38 specimens from various Indo-west Pacific localities (Clark and Rowe, 1971: 141). Recently, in 2016, this short-spined, brilliantly coloured, shallow-water species was recorded for the first time in Pakistan at Charna Island (24° 53′ 56.42 N, 66° 36′ 15.29 E) through *in situ* photographs (Fig. 1A-B). The species is characterized by having spines banded in red and yellowish to violet or green and base red, globiferous pedicellariae with one lateral tooth on each side, bare test apple-green and ambital pore pairs away from the outer edge of ambulacra (Clark and Rowe, 1971; Schultz, 2015).

Thus, in all, five species of sea urchins and one of sand dollar comprise the currently known echinoid fauna of Pakistan.



Fig. 1A-B. Salmacis bicolor L. Agassiz in L. Agassiz & Desor, 1846, from Charna Island, Pakistan. Photographed by Indus-Scuba. 6 March 2016.

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