

**SOLENOCERA INDICA NATARAJ, ONE OF THE COMMERCIALY
IMPORTANT PENAEID PRAWNS OF INDIAN WATERS AS A
SYNONYM OF SOLENOCERA CRASSICORNIS (H. MILNE EDWARDS)**

ABSTRACT

The validity of the specific name *Solenocera crassicornis* (H. Milne Edwards, 1837) is discussed and *Solenocera indica* Nataraj (1945), a commercially important penaeid prawn from Indian seas is shown to be a synonym of the former.

NATARAJ (1945) while describing *Solenocera indica* (as *Solenocera indicus*) as a new species from India, referred some specimens in the collection of the Indian Museum ('Investigator' material) provisionally identified as "? *S. crassicornis* Milne Edwards" to his new species *S. indicus*. While doing so he stated, "Milne Edwards' original description of *S. crassicornis* is unfortunately very meagre, but it is stated to resemble closely his *S. membranacea* which is characterised by the possession of a pterygostomian spine. This spine is absent in *S. indicus*."

The characteristic feature of *S. indicus* Nataraj is the absence of lateral spines on the telson. Apart from *S. subnuda* Kubo, the absence of lateral spines on the telson is a feature shared by no other described species of *Solenocera* except *S. crassicornis*. Although the description of Milne Edwards is brief, he clearly refers to this significant feature and his specimens had been collected from the coasts of India, the type specimen according to Bate (1881) being from Bombay.

Although Milne Edwards has not mentioned that his *P. crassicornis* possessed pterygostomian spines, subsequent authors included his species in the group with pterygostomian or branchiostegal spines (Bouvier, 1908; Burkenroad, 1934; Anderson and Lindner, 1943; Nataraj, 1945 and Kubo, 1949). But none of these authors have examined the type specimen, which is said to be, unfortunately, lost (Burkenroad, 1934). Kubo (1949) bases his opinion about the presence of pterygostomian spines in *S. crassicornis* on the observations of Burkenroad (1934) who in turn gets the idea from Bouvier (1908). However, Burkenroad is doubtful whether Bouvier himself has actually examined the type specimen.

The only author who appears to have seen the type specimen of *S. crassicornis* (Milne Edwards) and reported on it is Bate (1881). According to him 'the specimen is labelled Bombay and corresponds with the author's description, to which may be

added the presence of 4 teeth that are to be found on the anterior extremity of the carapace and are of generic value'. Herein, probably, lies the cause of all the later confusion about the presence of pterygostomian spine in the species. But the identity of the 4 spines referred to by Bate is not at all clear. In his diagnosis of the genus *Solenocera*, Bate (1881, p. 184) states ' . . . four teeth on each side of the carapace, one at the outer orbital angle, one supraorbital, one hepatic and one near the antero-inferior angle of the carapace'. And he included *S. membranacea* (Fabr.), *S. crassicornis* (M. Edw.) and *S. lucassi* Bate under the genus. Subsequently Bate (1888) created a new genus *Philonicus* characterised by 'carapace armed with 4 teeth on each side, namely, the first antennal tooth on the frontal margin, one behind it, one behind the second antenna and one on the hepatic region', and included *Philonicus mulleri* Bate, *P. lucassi* (Bate) and *P. pectinatus* Bate under the new genus and felt that *Penaeus membranacea* and *P. crassicornis* of Milne Edwards also belong to this genus. Both *P. mulleri* and *P. pectinatus* have no pterygostomian or branchiostegal spines. So in all probability the four spines referred to by Bate are the supraorbital, postorbital, antennal and hepatic spines, which are the spines found in *S. indicus* Nataraj also. Moreover, *S. crassicornis* described by Wood-Mason and Alcock (1891) lacks the pterygostomian or branchiostegal spine. From these it may be reasonably assumed that *S. crassicornis* H. Milne Edwards is without pterygostomian or branchiostegal spine.

Once the question of the pterygostomian spine is settled, most of the other features point to the synonymy of *S. crassicornis* (M. Edw.) and *S. indicus* Nataraj. The type specimen of *S. crassicornis* has come from Bombay where *S. indica* has been later reported to form a commercial fishery (Kunju, 1968). The absence of lateral spines on the telson, as pointed out earlier, is another important feature common to both species. Hence, it is clear that, although Nataraj's description of *S. indicus* is very detailed and accurate, it should be considered only as a redescription of *S. crassicornis* (M. Edw.) the type specimen of which is considered lost by Burkenroad (1934).

Although Cheung (1960) suggested the possible synonymy of *S. indica* and *S. subnuda* and Kunju (1968 and 1970) synonymised them, in view of the fact that there are differences in the ycal features according to the descriptions of the two species, the synonymy cannot be established unless the type specimens are re-examined.

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