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## ***Salmoneus yoyo* nov. sp., a peculiar new infaunal shrimp from Lombok, Indonesia (Decapoda, Caridea, Alpheidae)**

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### **Abstract**

An unusual new species of the alpheid shrimp genus *Salmoneus* Holthuis, 1955 is described from Sekotong Bay, south-western Lombok, Indonesia. The holotype and single known specimen of *Salmoneus yoyo* **sp. nov.** was collected with a suction pump from a burrow of unknown host, on a seagrass flat partly exposed at low tide. The new species presents three characters on the chelipeds that are unique within *Salmoneus*: a conspicuous, mesially curved, hook-like process on the distomesial margin of the merus, a row of blunt teeth on the ventromesial margin of the merus, and a series of blunt teeth on the ventromesial margin of the propodus. *Salmoneus yoyo* **sp. nov.** also has a characteristic colour pattern consisting of bright red chromatophores occupying most of the carapace surface, except for the frontal and post-frontal areas.

**Key words:** Crustacea, alpheid shrimp, *Salmoneus*, infauna, commensalism, seagrass flat, burrow, Indonesia

### **Introduction**

The alpheid shrimp genus *Salmoneus* Holthuis, 1955 contains both free-living and symbiotic taxa. The latter are represented by infaunal species associated with burrows of larger decapod crustaceans, such as callianassid ghost shrimps or other alpheid shrimps, *Alpheus* spp. (Dworschak et al. 2000; Anker 2003a, 2010; Anker & Marin 2006; Komai 2009). The biology of all infaunal species of *Salmoneus* is poorly known and for some the hosts are unknown as well (Felder & Manning 1986; Anker 2003b; De Grave 2004). In addition, most of them are known from only one or a few specimens, and some only from their type localities.

A brief preliminary survey of seagrass flats of western and southern Lombok, Indonesia, conducted in May 2014, using both suction pump and digging-sieving methods, resulted in the collection of several infaunal species of *Salmoneus*. Among them was a single adult specimen of an undescribed species, easily distinguishable from all other species of the genus by several unique morphological characters as well as colour pattern. This species is described as new in this study. The holotype is deposited in the Bogor Zoological Museum, Indonesian Institute of Sciences, LIPI, Bogor, Java, Indonesia (MZB). The carapace length (cl, in mm) was measured along mid-dorsal line from the tip of the rostrum to the posterior margin of the carapace. The mouthparts were observed externally and not dissected to avoid further damage of the holotype.

### **Systematics**

#### **Family Alpheidae Rafinesque, 1815**

#### **Genus *Salmoneus* Holthuis, 1955**

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