



## On the diagnostic characters of the genus *Gibbesia* (Crustacea: Stomatopoda: Squillidae)

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Manning & Heard (1997) proposed the creation of the genus *Gibbesia* for *Squilla neglecta* Gibbes, 1850, based on the presence of five teeth on the dactylus of the raptorial claw and on the absence of the mandibular palp, the latter character not being found in any other species belonging to the genus *Squilla*,

The recognition of *Squilla prasinolineata* Dana, 1852 as a member of the genus *Gibbesia* by Ahyong (2001), in his study of the Stomatopoda of Australia, although this was considered provisional, is founded on the number of teeth on the dactylus of the raptorial claw. With the removal of *S. neglecta*, *S. prasinolineata* came to be the only species still in the genus *Squilla* that has 5 teeth on the dactylus, although the presence of the mandibular palp in this species raises questions as to the exactitude of the diagnostic characters or its insertion in the genus of Manning & Heard (1997).

Several authors have discussed the validity of the genus characters. According to Kemp (1913) and Kemp & Chopra (1921), the presence or absence of the mandibular palp and the number of epipods may have value at the species level, but might not be useful characteristics to reveal affinities at the genus level. However, according to Manning (1968), these characteristics, if combined with others such as the shape and number of teeth of the raptorial claw, reduction of the carinae of the carapace and the abdomen, and structure of the uropod, can be very useful to delimit species groups.

Manning & Camp (1983) cited the number of teeth on the raptorial claw and the presence or absence of the mandibular palp as important genus characters. The establishment of the genus *Gibbesia* was founded on this statement, emphasizing that for Manning & Heard (1997), the more important character was the total absence of the mandibular palp.

Thus, it is proposed herein to emend the diagnosis of the genus *Gibbesia*, with the addition of new characters and removal of the absence of the mandibular palp as the principal diagnostic character. Note that the following synonymies are not complete; they refer exclusively to papers that deal with systematics.

### Taxonomy

#### Order Stomatopoda Latreille, 1817

#### Superfamily Squilloidea Latreille, 1802

#### Family Squillidae Latreille, 1802

#### Genus *Gibbesia* Manning & Heard, 1997

*Gibbesia* Manning & Heard, 1997: 313.— Ahyong, 2001:184.— Foster *et al.*, 2004: 56.

**Diagnosis.** Rostral plate with median carina. Eyes large, cornea bilobed. Ocular scales separate. Carapace with median carina. Mandibular palp present or absent. Presence of 4 or 5 epipods. Dactylus of raptorial claw with 5 teeth. Lateral process of fifth thoracic somite simple; lateral processes of sixth and seventh somites simple or bilobate. Abdominal somites 1–5 with 4 pairs of carinae. Submedian teeth of telson with fixed apices.