

Supplement I

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SUMMARY

A new species, *Alpheus brucei*, in the Sulcatus Group, is described from Heron Island, Queensland, on the Great Barrier Reef.

INTRODUCTION

The following species was received too late for its description to be included in the foregoing paper, so it is being issued as a separate supplement.

***Alpheus brucei* sp. nov.**

Fig. 1

HOLOTYPE: 24 mm ovigerous female from Heron Island reef flat, at 0.5 m, from a head of *Porites andrewsi* Vaughn. Collected by A. J. Bruce, 1/9/78.

DIAGNOSIS: Rostrum acute, 3.4 times as long as broad at base, reaching to end of first quarter of second antennular article, with rounded carina extending posteriorly well behind corneas. Orbitorostral grooves rounded, broad and moderately deep, eyehoods moderately inflated. Anterior margin of orbital hoods bearing teeth 0.3 as long as rostrum and directed slightly inwards. Margin between orbital teeth and rostrum extended as convex, flattened prominences that curve deeply at base of rostrum. Eystalk bearing rounded, finger-like process that in lateral view juts out beyond margin of carapace and reaches to level of middle of orbital teeth in lateral view, but is concealed by orbital teeth in dorsal view; distal portions of process bearing short setae. First 2 antennular articles nearly equal in length, third a little shorter, second article 1.7 times as long as broad. Stylocerite with acute tip reaching to middle of second antennular article. Scaphocerite with lateral margins straight, lateral tooth extending just past end of antennular peduncle but well beyond squame; squame narrow, not reaching end of antennular peduncle. Carpocerite as long as lateral tooth of scaphocerite. Basicerite with acute tip of tooth reaching past end of first antennular article.

Ratio of third maxillipeds: 10:3:5. Inferointernal margin of first article terminates in a small acute tooth. Tip of third article bearing tuft of long hairs.

Large chela slightly compressed, 3.7 times as long as broad with fingers occupying the distal third. Surface smooth and bearing only sparse setae. Palm bearing strong, well-developed transverse groove proximal to the dactylus. Dactylus high, laterally compressed, superior surface a rounded carina, tip broadly rounded; plunger low, truncate. Both fingers with opposite faces distal to plunger and socket developed into thin knife-like ridges that shear when fingers close. Merus 2.2 times as long as broad; superior margin