



Figure 5. Gyne head, frontal (dorsal) view. VC=vertexal carinae. (a.) *C. longiscapus* (Panama). (b.) *C. muelleri* (Panama)

Figure 6. Male, lateral view. PS=propodeal spine. (a.) *C. longiscapus* (Panama). (b.) *C. muelleri* (Panama)

Figure 7. Male postpetiole, dorsal view. PT=postpetiolar tubercle. (a.) *C. longiscapus* (Panama). (b.) *C. muelleri* (Panama)

characters listed above and, therefore, should be used for identification only with caution: Whitish integumental “bloom” (actinomycete symbiont?), when present, rarely occurring within the antennal scrobe. Frontal triangle usually broad, usually forming a finger-shaped area between the frontal lobes that is rounded posteriorly. Posterior mesonotal tubercles usually strongly produced (Fig. 2a, PT), but variable, more weakly produced in some specimens. Propodeal angle usually present, with dorsal and declivous faces usually separated by a distinct shoulder.

GYNES (diagnosis): Measurements as in Table 2. Like the workers, possessing 11 antennal segments, palpal formula 4, 2, and the unique *C. longiscapus* s.l. characters of the elongate antennal scapes and weakly expanded frontal lobes. Color, microsculpture, integumental bloom, and pilosity as in the workers.

C. longiscapus gynes generally differ from those of the new species in the same character states as the workers except, obviously, for those of the alitrunk. The most reliable characters include: Vertexal carinae strongly produced (Fig. 5a, VC). Posterior tubercles on the postpetiole forming low, rounded tumuli (as in worker, Fig. 3a, PT); in dorsal view, the postpetiole only slightly emarginate and broadly and shallowly impressed posteriorly (as in worker, Fig. 3a). Hind femur lacking ventral carinae and lobe (as in worker, Fig. 4a, arrow).

Somewhat less reliable, more continuously varying characters include: Frontal triangle usually broad, usually forming a finger-shaped

area between the two lobes that is rounded posteriorly. Whitish integumental “bloom” (actinomycete symbiont?) rarely present within the antennal scrobe.

MALES (diagnosis): Measurements as in Table 2. Possessing 13 antennal segments and palpal formula 4, 2. Mandibles with four or five teeth, the basal (fifth) tooth sometimes reduced to a rounded basal angle. As in the workers and gynes, head and alitrunk rather uniformly foveate, the foveae occasionally surrounded by a whitish “bloom”; pilosity as in the other castes. Based on three dissections (one male from each of three Panamanian nests), male genitalia conform closely to the plesiomorphic attine pattern: parameres simple, forming short, rounded, concave lobes; aedeagus simple, forming a broad rounded lobe with minute teeth along the ventral edge; and volsella with digitus simple, long, narrow, and strongly recurved. The only departure from the plesiomorphic attine pattern (in which the volsellar cuspis is absent) is that the cuspis is present as a short, simple, rounded lobe.

In general, males of *C. longiscapus* are difficult to distinguish from males of the new species, but the most reliable characters include: Postpetiole in dorsal view weakly emarginate posteriorly (Fig. 7a); and the propodeal spines short, the width at the base of the spine exceeding the total spine length (Fig. 6a, PS). In all *C. longiscapus* males examined, the head and usually the dorsum of the alitrunk are more darkly pigmented (testaceous to fuscous brown) than the rest of the body, which is yellow, a pattern suggesting a day-flying species.