

1.15–1.27, EL 0.46–0.54, SL 0.66–0.72, CI 81–84, EI 38–43, SI 53–59 (n = 18). Dorsal part of an- and katapisternum without erect hairs; very flat, dorsally truncate petiole; very few erect hairs on base of first gastral tergite; coloration variable, even within one nest, from uniform yellowish with darker posterior margins of gastral tergites to completely dark brown; in most cases at least gennae lighter colored. HOLOTYPE: Queen AL 2.56, HL 1.51, HW 1.24, SL 0.72, EL 0.52, CI 82, EI 42, SI 58.

COMMENTS: This species is distinguished from all other species in the queen caste by the shining dorsal part of the katapisternum, the lateral part of the propodeum below the spiracle being devoid of any pubescence, the small, narrow metapleural gland orifice, and the low, dorsally truncated petiole. *C. mossyna* and *petalae* are now synonymized because more material is available, showing a widely overlapping variation in coloration and pilosity, including the pubescence. A new inspection of the main difference between the two species, with *mossyna* having a much flatter alitrunk (Agosti, 1991: figs 13, 14), showed that this very distinct character is actually based on an artifact, with the ventral side of the alitrunk gently squashed. The correlation between this character, the size of the workers, was rather coincidental and based on a low number of specimens.

BIOLOGY AND DISTRIBUTION: This species has been found in a set of six syntopic host plants; the understory trees *Saraca thaipingensis* (Caesalpiaceae), *Drypetes longifolia* (Euphorbiaceae), and *Ryparosa fasciculata* (Flacourtiaceae); and the woody climbers *Strychnos vanprukii* (Loganiaceae), *Luvunga* sp. (Rutaceae), and *Spatholobus bracteolatus* (Papilionaceae) (Maschwitz et al., 1991, Moog and Maschwitz, 1994, Moog et al., in press). Despite this highly diverse host range, both field studies and extensive examination of herbarium specimens have shown that congeneric host plant species are not colonized by *petalae* (Moog et al., in prep.). Preliminary results of "host acceptance" experiments with colony-founding queens collected from *Saraca* and *Spatholobus* and placed on one of the other syntopic host plants indicate that foundress queens sometimes accept an alternative host species (unpublished

results). However, they do not accept any other plant species with suitable internodes (controls). The mechanisms underlying this surprising queen response to particular, taxonomically diverse host plants is not yet understood and needs further study.

Water bailing is employed by workers to empty flooded nest chambers (Moog et al., 1997). In *Saraca* (and other hosts), worker activity on the plant surface is concentrated on young developing foliage and the ants reduce herbivore damage to young leaves significantly (Moog and Maschwitz, 1994; unpubl. results). This species also precludes oviposition by female lycaenid butterflies. In addition, lycaenid larvae, even myrmecophilic ones, placed on leaf flushes and confronted with patrolling workers never survive (Seufert and Fiedler, 1996). *C. petalae* is restricted to the Malay Peninsula.

MATERIAL EXAMINED: W-MALAYSIA, Selangor, Ulu Gombak, 2/23/1993, Joachim Moog, 93-105, ex: *Strychnos vanprukii*; Perak, Cameron Highlands, Iskandar Waterfall, 3/12/1993, Joachim Moog, 93-113, ex: *Saraca thaipingensis*; Pahang, Fraser's Hill, 2/19/1993, Joachim Moog, 93-134, ex: *Spatholobus bracteolatus*, alt.: ca. 1300 m, mature colony; Pahang, Fraser's Hill, 3/19/1993, Joachim Moog, 93-142, ex: *Spatholobus bracteolatus*, alt.: ca. 1300 m, colony size: ca. 630 workers; Pahang, Fraser's Hill, 3/14/1993, Ulrich Maschwitz, 93-146, ex: *Ryparosa fasciculata*, alt.: 835 m; Pahang, Fraser's Hill, 3/24/1993, Joachim Moog, 93-148, ex: *Ryparosa fasciculata*, alt.: ca. 830 m, mature colony; ca. 2000 workers; Pahang, Fraser's Hill, 3/24/1993, Joachim Moog, 93-149, ex: *Spatholobus bracteolatus*; Pahang, Fraser's Hill, 3/14/1993, Ulrich Maschwitz, 93-157, ex: *Ryparosa fasciculata*; Pahang, Fraser's Hill, 2/21/1994, Joachim Moog, 94-068, ex: *Luvunga* sp., alt.: 800 m; Pahang, Fraser's Hill, 2/21/1994, Joachim Moog, 94-072, ex: *Luvunga* sp., mature colony; Perak, Gerik, Lake Temenggor, Belum, 3/1/1994, Joachim Moog, 94-084, ex: *Ryparosa fasciculata*, alt.: ca. 780 m, mature colony; Perak, Gerik, Lake Temenggor, Belum, 3/2/1994, Joachim Moog, 94-092, ex: *Ryparosa fasciculata*, mature colony; Perak, Gerik, Lake Temenggor, Belum, 3/3/1994, Joachim Moog, 94-095, ex: *Drypetes longifolia*; Perak, Ge-