



## Four new species of the genus *Casmara* Walker, 1863 (Lepidoptera: Oecophoridae) from China

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### Abstract

Four new species of the genus *Casmara* Walker are described based on specimens collected in China: *C. quadrilatera* **sp. nov.**, *C. acantha* **sp. nov.**, *C. longiclavata* **sp. nov.**, and *C. aduncata* **sp. nov.** Illustrations of the adults and male genitalia are provided.

**Key words:** Lepidoptera, Oecophoridae, *Casmara*, new species, China

### Introduction

The genus *Casmara* Walker, 1863 is characterized by having a large-sized body, an elongately narrow forewing with tufts of raised scales, vein  $R_5$  extended to apex, and prominent tufts of expanded, modified scales on the male tibiae and tarsi. To date 15 *Casmara* species have been recognized, ranging from Japan, South China and India, through Southeast Asia and the Indonesian islands to Papua New Guinea and Australia (Queensland) (Meyrick 1922, Clarke 1963, Diakonoff 1966, Moriuti 1985, Common 2000). Prior to this study, four species had been recorded in China: *C. epicompsa* Meyrick, 1922, *C. agronoma* Meyrick, 1931, *C. patrona* Meyrick, 1925 and *C. rodochalca* Meyrick, 1934.

The genus *Casmara* Walker is allied to *Ashinaga* Matsumura, 1929 in general appearance and structure of the male genitalia, but can be distinguished by the antennae without combs of long scales, and the shorter legs of adults without scale tufts on hind tibiae and tarsi. It is also closely allied to *Epimecyntis* Meyrick, 1924 and *Latistica* Meyrick, 1907. However, the former might be a synonym of *Casmara*, and the latter is much similar to *Ashinaga*, based on the examination of the types. The taxonomic position and relationships of these genera are in need of phylogenetic analysis, which is beyond the scope of the present paper.

Little is known about the biology of *Casmara* species. In China, *C. agronoma* and *C. patrona* are stem borers of both *Camellia sinensis* and *Camellia oleifera* (Theaceae). Larvae bore first in leaf axils, then in secondary shoots and stems, from top to bottom, causing withered branch tips and hollowed stems. In central Java, *C. kalshoveni* was bred from the trunk of *Murraya paniculata* (Rutaceae). These three species bore mostly in the ligneous sections of the stem, and pupation occurs in the larval tunnel (Chao et al. 2007, Diakonoff 1966).

Species of *Casmara* are distributed in China, Korea, Japan, India, Southeast Asia, Papua New Guinea and northeastern Queensland of Australia, with the majority occurring in China and Southeast Asia. *Casmara exulta* is probably the most common and widespread species of the genus (Common 2000).

The aim of the present paper is to describe four new species collected by light trap in southern China. Species authorship is attributed to the first author. Terminology in general follows Diakonoff (1966). The types are deposited in the Insect Collection, College of Life Sciences, Nankai University (NKUM), Tianjin, and in the Institute of Zoology, the Chinese Academy of Sciences (IZCAS), Beijing, as indicated below.