

木棉织蛾与肉桂木蛾研究*

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摘要 本文记述了小蛾类昆虫的两个种：其中危害木棉的木棉织蛾是新记录种，危害肉桂的肉桂木蛾是新种。

关键词 木棉织蛾；肉桂木蛾；木棉；肉桂

木棉树 *Bombax ceiba* Linnaeus 为特种经济树，所产木棉为军用物资并能制作高级床垫、枕心，对人体有保健作用。肉桂 *Cinnamomum loureirii* Nees 和香樟 *Cinnamomum camphora* Nees 同属樟科植物，肉桂是名贵中药，香樟可制樟脑，供药用和工艺用。多年来，它们分别遭受木棉织蛾和肉桂木蛾的严重危害。尽管这两种害虫的生物学和防治已有过报道，但种名问题一直没能解决。经解剖研究：木棉织蛾是个新记录种，肉桂木蛾是个新种^[1~3]。现分别记述如下。

木棉织蛾 *Tonica niviferana* Walker 新记录种

翅展25~33 mm，头部白色。唇须向上曲超过头顶，第二节长、白色，末节狭长、黑褐色，基部有宽鳞片丛。胸部背面白色，有分散黑褐色宽鳞片和4撮白褐色鳞片丛。前翅白色，前缘有黑褐色基斑和中带；基斑中下部与中带间各有一白色竖鳞丛；中带里有5个竖鳞丛；外缘鳞片黄褐色，向内有6块黑褐斑。后翅银淡黄色，翅顶黄褐色。腹部黄褐色，两侧有黑斑，末端黑色，有浅黄色长毛丛（易于脱落）。胸足黑褐色，有淡黄色斑。雄性外生殖器：爪形突长圆形；瓢形突两臂在中部膨大呈球状汇合成U字形，表面有许多粗短毛；抱器瓣强烈几丁质化；阳茎圆柱状，基部粗、端部细。雌性外生殖器：后表皮突是前表皮突长的4倍；交配孔外露；交配囊袋状；囊突一枚，牛角状，基部有短刺。

分布：云南勐峇，福建福州，广东广州，海南尖峰岭；印度，锡金。

肉桂木蛾 *Thymiatrix loureiriicola* Liu 新种

翅展♂36~42 mm，♀43~50 mm，头部灰黄色。触角鞭节黄褐色，柄节淡黄褐色。唇须灰黄色，基部黄褐，第二节是末节的两倍长。胸部和翅基片银白色，有些鳞片末端呈褐色。腹部黄褐色，背面深、腹面浅、两侧更浅。前翅狭长，末端平截；银白色，有不规则深褐斑点；前缘、中室中部和端部深褐色略向后延伸；顶角至臀角间有6~7枚黄褐色斑点。R₁和R₅脉共柄，基部又与R₃脉共柄，M₂脉基部靠近M₃脉。后翅灰褐色，R₅和M₁脉共柄，M₂脉基部靠近M₃脉，M₃与Cu₁脉共柄。前、中足灰褐色，后足黄褐色。中胫节端距两枚，内长外短；后胫节中部和端部各有距两枚，内距是外距长的2倍。雄性外生殖器：爪形突呈三角

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标本承蒙德成同志在大英博物馆与模式种核对，成虫图承魏梅同志绘制，谨此一并致谢！

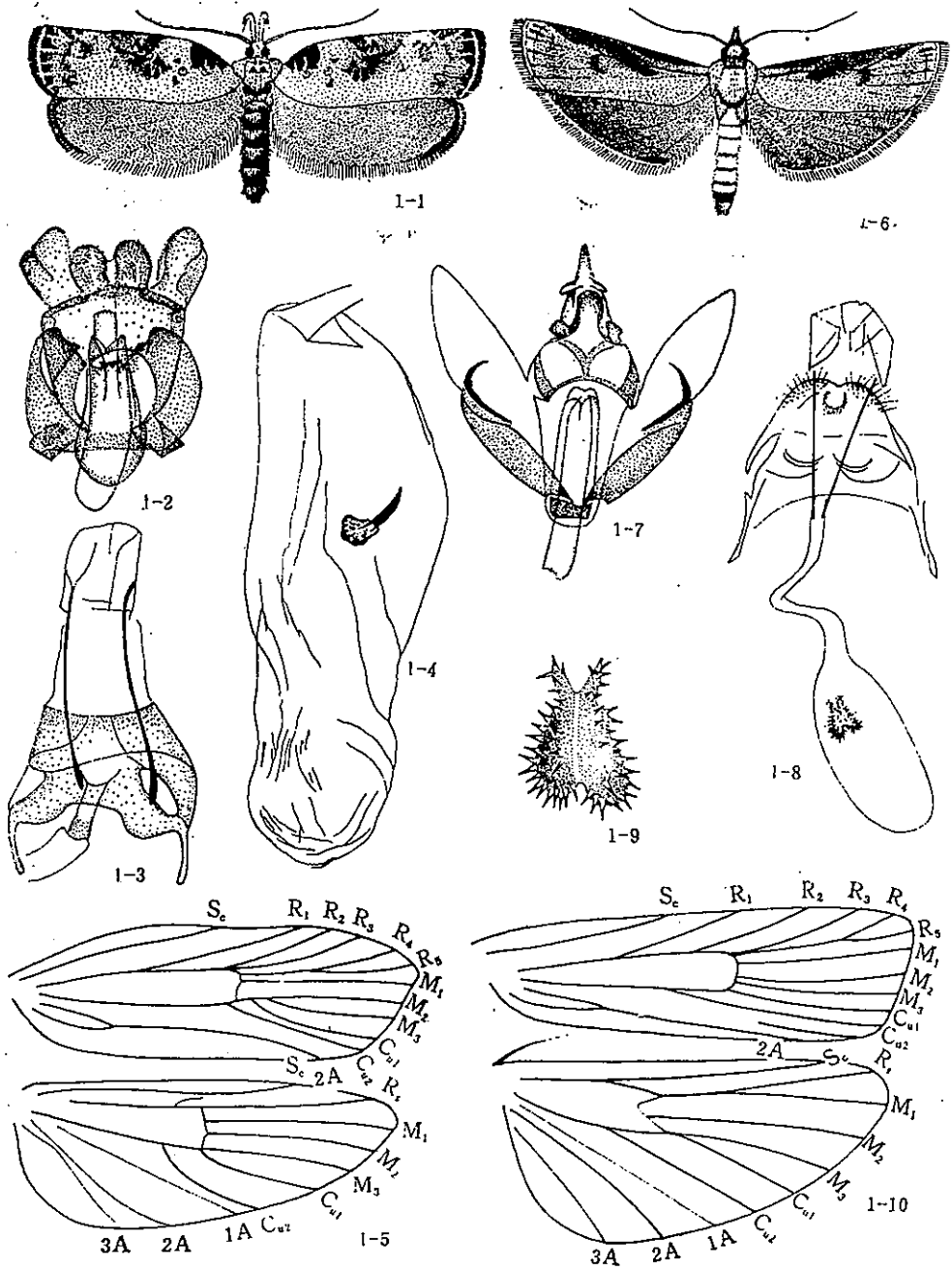


图1 木棉织蛾 *Toxica niviferana* Walker, 新记录种: 1-1 成虫; 1-2 雄性外生殖器; 1-3 雌性外生殖器(产卵瓣及交配孔); 1-4 雌性外生殖器(交配囊及囊突); 1-5 翅脉相

图2 肉桂木蛾 *Thymiatrix loureiriicola* Liu, 新种: 1-6 成虫; 1-7 雄性外生殖器; 1-8 雌性外生殖器; 1-9 囊突放大; 1-10 翅脉相

形，基部有 2 个耳状突；颚形突两臂汇合后向上举，末端圆钝；抱器瓣梭状，抱器腹几丁质化程度强，端部形成强烈弯钩；阳茎细长，外面有长阳茎端环管，基部有扁长方形阳茎基环。雌性外生殖器：后表皮突是前表皮突长的 2 倍；囊突 1 枚，呈 X 状，一端尖，另一端粗大圆钝，表面多刺。

本种与 *T. melitacma* Meyrick 十分近似，主要区别表现在雄性外生殖器爪形突基部有 2 个耳状突和抱器腹末端的强烈弯钩。

正模♂：江西九连山，1975·Ⅶ·9，宋士美采。

配模♀：福建云霄，1979·Ⅴ·22，吴志远采。

副模 16♂♂、4♀♀：上海，1933·Ⅶ·29。浙江（宁波，1941·Ⅲ·18）。江西（宜春，1978·Ⅶ·10；南昌，1974·Ⅶ·18；弋阳，1984·Ⅶ·4；九连山 1975·Ⅶ·7）。福建（云霄，1979·Ⅴ·22）。海南（万宁，1963·Ⅴ·27）。广西（桂林，1963·Ⅴ·12~16；龙胜，1963·Ⅶ·6）。

模式标本保存在中国科学院动物研究所昆虫标本馆。

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A Study of Microlepidoptera (Oecophoridae and Xyloryctidae) Damaging Bombax and Cinnamomum

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Abstract *Bombax ceiba* Linnaeus is a special kind of economic plant. *Cinnamomum loureirii* Nees is a rare traditional Chinese medicine. Both of them are damaged by small caterpillars over many years. Through identification, one is a new record and the other is new to science.

Type specimens are preserved in the Institute of Zoology, Academia Sinica.

1. *Tonica niviferana* Walker, n. rec. (Oecophoridae)

Distributions: Hainan Province (Jianfengling), Yunnan Province (Menglung), Fujian Province (Fuzhou), Guangdong Province (Guangzhou); India, Sikkim.

2. *Thymiatria loureiriicola* Liu, sp. nov. (Xyloryctidae)

Wing expanse: ♂ 36~42 mm, ♀ 43~50 mm. Head greyish-yellow. Flagellum of antenna yellowish-brown, with cilia, scape light yellowish-brown. Palpus greyish-yellow, curled upward. Thorax and tegulae silver white. Abdomen yellowish-brown: dark on dorsal, light on ventral and more lighter on both sides. Forewing elongate-truncate, long and narrow, dilated, broadest at termen; silver white; costa as far as upper edge of cell irregularly suffused with dark brown; 6~7 yellowish-brown spots across the inner margin of termen. Hindwing, prolegs and mesolegs greyish-brown, metalegs yellowish-brown. Male genitalia: Uncus triangular, with two ear-like protuberance on the base; gnathos well-developed; valva broad, cucullus somewhat pointed; sacculus chitinous and strongly hooked terminally; aedoeagus long. Female genitalia: Postapophyses 2 times longer than anapophyses; one signum X-shaped, with numerous spines.

It is closely allied to *T. melitacma* Meyrick in appearance but differs from the later by two ear-like protuberances on the base of uncus and hook at the end of sacculus of male genitalia.

Holotype ♂: Jiangxi Province (Jiulienshan, 9. June 1975, Song Shimei). Allotype ♀: Fujian Province (Yunxian, 22. May 1979, Wu Zhiyuan). Paratypes 16 ♂♂, 4 ♀♀: Shanghai (29. June 1933), Zhejiang Province (Ningbo, 18. March 1941), Jiangxi Province (Yichun, 10. June 1978, Nanchang, 18. June 1974, Yiyang, 4. June 1984, Jiulienshan, 7. June 1975), Fujian Province (Yunxian, 22. May 1979), Hainan Province (Wanning, 27. May 1963), Guangxi Autonomous Region (Guilin, 12~16. May 1963, Longshen, 6. June 1963).

Key words *Tonica niviferana*; *Thymiatria ioureiriicola*; *Bombax ceiba*; *Cinnamomum loureirii*