A New Species of the Genus Ditrigona Moore, 1888 (Lepidoptera: Drepanidae) in China

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A new species of the genus *Ditrigona* Moore, 1888 (Lepidoptera: Drepanidae) in China

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**Abstract**

A new species of the genus *Ditrigona* Moore, 1888 (Lepidoptera: Drepanidae: Drepaninae), *Ditrigona clavata* sp. nov. is described from Guangxi and Guangdong provinces in China. The new species can be distinguished from its congeners by 5 transverse fasciae in the forewing and 4 transverse fasciae in the hindwing. Adults and their genitalia are illustrated. The key for the separation of the species-group *D. triangularia* by Wilkinson is modified. The type specimens are deposited in the Entomological Laboratory, South China Agricultural University, Guangzhou, China.

Key Words: Drepaninae; key; taxonomy; Guangxi province; Guangdong province

**Results**

*Ditrigona clavata* sp. nov. (Figs. 1-7)

**DIAGNOSIS**

Adults are externally close to those of *D. polyobotaria* (Oberthür, 1923), but can easily be separated by the following features: 5 transverse fasciae in the forewing, 4 transverse fasciae in the hindwing; 8th segment of abdomen strongly sclerotized, ostium arc-shaped, corpus bursae circular and without filiform structure in female genitalia.

**DESCRIPTION: MALE (FIG. 1)**

- Wingspan 27 mm. Head brown, vertex white; antenna yellowish brown except dark brown at base, serrate; labial palpus blackish brown, long and stretch forwardly; proboscis strongly developed. Thorax covered with white scales. Abdomen grayish white. Forewing ground color white; costal margin smooth, brown; barely falcate at apex; subbasal fascia gray and weakly marked; antemedial fascia light color and broad; medial fascia dark color and rather broad; postmedial fascia dark color, sodium hydroxide (NaOH), and mounted in glycerine (C₃H₂O₃).
- Photographs of adults were taken by Nikon COOLPIX S8000 digital camera and those of genitalia were taken by Carl Zeiss Discovery V12. Processing of the photos was done with Adobe Photoshop 6.0. The type specimens are deposited in Entomological Laboratory, South China Agricultural University (SCAU), Guangzhou, China.

**Materials and Methods**

Specimens were collected by light trap in Guangdong and Guangxi provinces (China). Abdomens of the specimens were cleared in 10% sodium hydroxide (NaOH), and mounted in glycerine (C₃H₂O₃). Photographs of adults were taken by Nikon COOLPIX S8000 digital camera and those of genitalia were taken by Carl Zeiss Discovery V12. Processing of the photos was done with Adobe Photoshop 6.0. The type specimens are deposited in Entomological Laboratory, South China Agricultural University (SCAU), Guangzhou, China.

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**Palabras Clave**: Drepaninae; clave; taxonomía; provincia de Guangxi; provincia de Guangdong
broad and slight excurved in middle; subterminal fascia slender, grayish brown; cilia short, grayish white. Hindwing ground color white; subbasal fascia unmarked; antemedial and medial fasciae nearly as same as forewing’s, but postmedial fascia broader than forewing’s, strongly excurved in middle; subterminal fascia same as forewing’s; outer margin cilia short, grayish white; inner margin cilia long, white.

MALE GENITALIA (FIGS. 3-6)

Uncus bifurcated at base, 1/2 times as long as tegument, each fork medium-long, slender at apex, broad at base; tegumen wide and arc-shaped, socii broad and wide, incurved at apex and strongly setose, shorter than uncus; gnathos degenerated; 1 pulvinus between tegument and valva, finger-shaped protuberance at pulvini; valva clavate, wide and thick at base; cucullus thin and long, strongly sclerotized; juxta similar triangle-shaped; saccus medium-long and thin. Aedeagus medium-long, horn-shaped, pointed at extremity; coecum broad and long, similar rectangle, weakly sclerotized, 1/3 times as long as aedeagus; vesica without cornuti. 8th tergite without octaval, weakly sclerotized; 8th sternite with octavals, strongly sclerotized.

DESCRIPTION: FEMALE (FIG. 2)

Wingspan 31 mm. Head brown, vertex white; antenna dark brown, serrate; labial palpus blackish brown, long and stretch forwardly. Thorax covered with white scales. Abdomen grayish white. Forewing ground color white; costal margin smooth, dark brown; barely falcated at apex; subbasal fascia gray and weakly marked; antemedial fascia light color and broad; medial fascia dark color and very broad; postmedial fascia dark color, broad and slight excurved in middle; subterminal fascia slender; cilia medium-long, dark gray. Hindwing ground color white; subbasal fascia unmarked; antemedial fascia slender and light brown; medial fasciae broad, grayish brown; postmedial fascia broad, grayish brown and strongly excurved in middle; outer margin cilia medium-long, dark gray; inner margin cilia long, white.

Figs. 1-7. Ditrigona clavata sp. nov. 1. Male, holotype; 2. Female, Paratype. 3. Male genitalia; 4. Aedeagus; 5. 8th tergite; 6. 8th sternite; 7. Female genitalia.
FEMALE GENITALIA (FIG. 7)

Anal papillae broad; 8th segment of abdomen strongly sclerotized; anterior and posterior apophyses absent; ostium arc-shaped; ductus bursae broad and short; corpus bursae large, circular and with a leaf-shaped sclerotized signum.

TYPE MATERIAL


DISTRIBUTION

China (Guangxi and Guangdong Provinces).

Etymology

The specific name is derived from the character of valva.

To assign the new species, *D. clavata* sp. nov., the key to the species-group *D. triangularia* proposed by Wilkinson (1968) is modified as follows:

Couplets 1-6 without change.

7. Wings with 4 transverse fasciae. Straight subterminal and subbasal fascia present .................................................. 8
—. Wings with 2 distinct transverse fasciae. No straight subterminal and subbasal fascia .............................. *D. fasciata* Hampson, 1893
8. Ostium slit-like, corpus bursae oval-shaped and with filiform structure in female genitalia .................. *D. polyobotaria* (Oberthür, 1923)
—. Ostium arc-shaped, corpus bursae circular and without filiform structure in female genitalia .................. *D. clavata* Li, Xin & Wang sp. nov.

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References Cited