

## A New Species of the Genus *Coeliodes* (Coleoptera, Curculionidae, Ceutorhynchinae) from Mt. Tamdao, North Vietnam<sup>1)</sup>

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**Abstract** A new ceutorhynchine species of the genus *Coeliodes* SCHOENHERR is described based on specimens collected from Mt. Tamdao, North Vietnam, under the name of *C. femoralis*. Photographs of habitus and illustrations of taxonomically important features are provided. The adults of the species are taken on the flowers of *Castanopsis* sp., and they seem to be a pollen-feeder, since pollen grains are found in their alimentary canals. This new species can be distinguished from other congeners by the relatively large body, a small tooth on each femur, and the complex endophallic sclerites.

### Introduction

Sixteen species of the genus *Coeliodes* SCHOENHERR have been known to occur in East Asia (HUSTACHE, 1916; KÔNO, 1935; VOSS & CHÛJÔ, 1960; KOROTYAEV, 1997; YOSHITAKE, 1999, 2000). Although four of them have been reported from Continental China and Taiwan, no record of *Coeliodes* weevil has hitherto been made from the territory of Vietnam.

Through the courtesy of Mr. Yûichi OKUSHIMA, Okayama, we had an opportunity to examine specimens of *Coeliodes*, which had been obtained from Mt. Tamdao, one of the most famous collecting sites in North Vietnam. After a careful examination, it has become clear that this species is new to science for the reason of peculiarity of the femora and male genital organ, which are different from those of the known members of the genus from East Asia.

In this article, we are going to describe the new *Coeliodes* species under the name of *C. femoralis* as the first member of the genus from Vietnam.

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1) Contribution from the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka (Ser. 5, No. 47).

## Materials and Methods

This study is based on the specimens collected by Mr. Yûichi OKUSHIMA from late April to early May, 1996 by net-sweeping of the flowers of *Castanopsis* sp. at the summit of Mt. Tamdao, North Vietnam. Methods used here for describing species are the same as those explained in YOSHITAKE (2000). The holotype and a part of the paratypes will be preserved in the Entomological Laboratory, Faculty of Agriculture, Kyushu University (ELKU), and the remaining paratypes are in the private collection of H. KOJIMA (PCHK).

## Description

*Coeliodes femoralis* YOSHITAKE et KOJIMA, sp. nov.

(Figs. 1–3)

**Male.** Reddish brown; head and median part of pronotum blackish; elytra with slightly darker transverse basal and premedian bands in entire width, which are obscure, longitudinally connected by a dark area between the first and third intervals, the premedian band being arcuate posteriorly on each side, suture and anterior margin blackish; meso-, metasterna and basal two ventrites and legs blackish.

Head clothed with recumbent brownish and yellowish grey scales, forehead with subrecumbent brownish scales along inner margin of each eye. Rostrum 1.27 times as long as pronotum, evenly curved. Antennae inserted before the middle of rostrum, funicle with first segment as long as second, third a little shorter than second, longer than fourth, fifth to seventh subequal in length to one another, each shorter than fourth, seventh almost as long as wide, club oblong-ovate, finely pubescent in apical third.

Prothorax 1.29 times as wide as long, widest near the base, slightly narrowed toward apical third, then rapidly narrowed toward subapical constriction; dorsum reticulate-punctured, with a shallow subapical median depression, clothed with dense recumbent or subrecumbent yellowish-grey subrectangular scales, which become brownish on median part, and bear yellowish ovate ground scales which form prescutellar patch.

Scutellum lanceolate, entirely covered with white oval scales.

Elytra 1.08 times as long as wide, subparallel-sided in basal halves, then almost straightly narrowed toward subapical calli; dorsum with whitish oblong ground scales, which form three indefinite bands in subbasal, median and apical parts; each interval with a median row of yellowish grey scales, which are subrecumbent, subrectangular, slightly dilated distad, truncated at the apex and much darker in the blackish area than those in reddish area; subapical calli with pointed tubercles each bearing a dark slender scale.

Pygidium coarsely and sparsely punctate, and thinly clothed with recumbent whitish scales and fine recumbent setae.

Femora each with a small tooth, which is concealed by white oval scales, and clothed with brownish subrecumbent scales and yellowish grey recumbent scales,

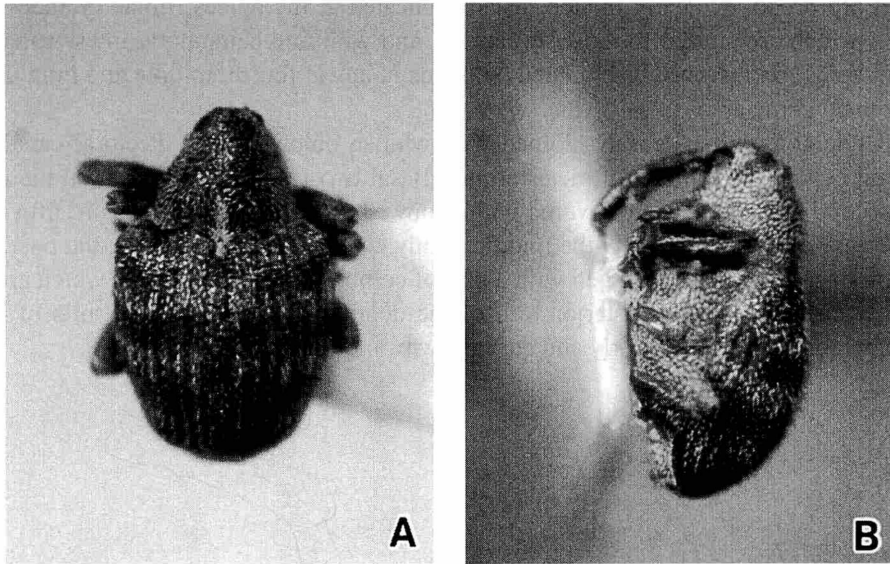


Fig. 1. *Coeliodes femoralis* sp. nov., holotype male; A, dorsal view; B, lateral view.

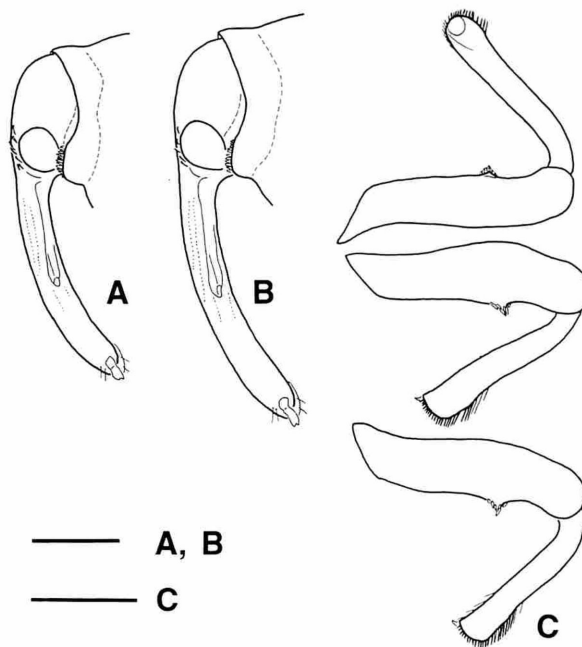


Fig. 2. *Coeliodes femoralis* sp. nov.; A, head, lateral view, male; B, ditto, female; C, femora and tibiae, male. Scale line=0.5 mm.

which are broad, evidently dilated distad, truncated at the apices; tibiae clothed with scales, which are similar to those on femora, and with fine hairs along interior margin and in apical part; front tibiae dilated outwards in apical fourth, middle and hind tibiae mucronate at the apices.

Underside rather densely clothed with whitish oblong scales. Pectoral canal extending beyond the middle of metasternum. Basal two ventrites depressed in the middle; second ventrite densely covered with yellowish scales at the depression; fifth ventrite transversely depressed in the middle, thinly covered with fine scales, the posterior margin of the depression fringed with a pair of combs of long erect setae, which are internally curved, and the posterior wall of the depression with a pair of tufts of long setae, which stretch posteriorly and curve downward.

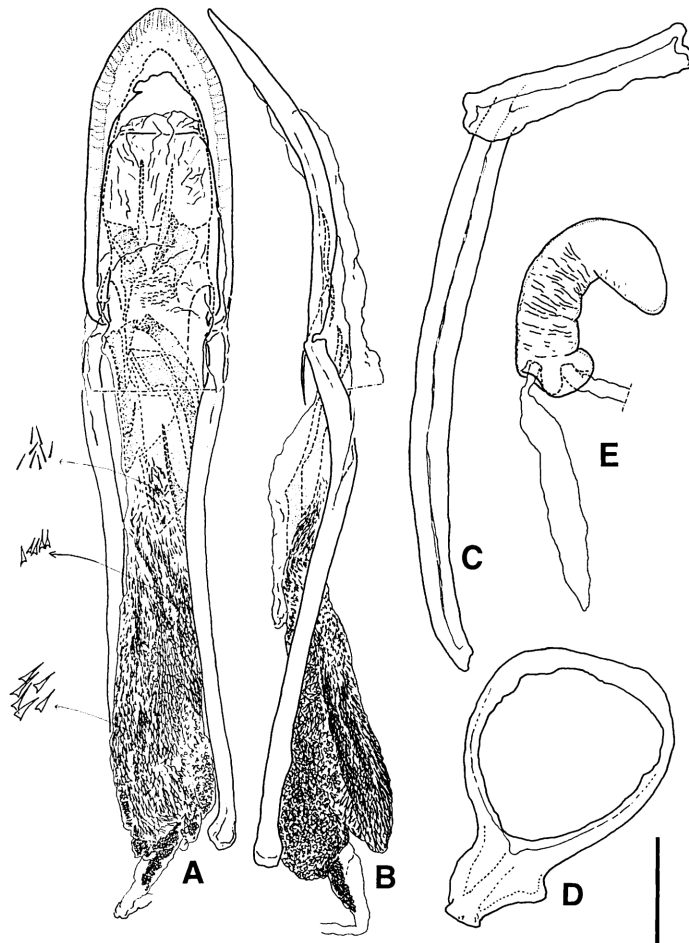


Fig. 3. Male and female genitalia of *Coeliodes femoralis* sp. nov.; A, aedeagus, dorsal view; B, ditto, lateral view; C, 9th sternite; D, tegmen; E, spermatheca. Scale line=0.2 mm.

Genitalia with aedeagal body broad, and endophallic sclerites complex and broad.

Female. Differs from the male in the following points: rostrum longer, 1.42 times as long as pronotum; antennae inserted at the middle of rostrum; tibiae not mucronate at the apex; pygidium depressed; pectoral canal reaching the posterior margin of metasternum; basal two ventrites each with a shallow longitudinal depression in the middle; fifth ventrite without depression.

Length: 2.52–2.77 mm.

*Type series.* Holotype ♂ (Type No. 3119, ELKU), [Vietnam] Vinh Phu Prov., Mt. Tamdao, 1~7-V-1996, Y. OKUSHIMA leg. Paratypes: [Vietnam] 3♂♂, 3♀♀, same data as the holotype (PCHK); 2♂♂, 3♀♀, same locality, 30-IV-1996, Y. OKUSHIMA leg. (PCHK).

*Distribution.* North Vietnam

*Etymology.* The specific name refers to the characteristic femora of this new species.

*Biological note.* According to Yûichi OKUSHIMA (2000, pers. comm.), the adults were taken on the flowers of *Castanopsis* sp. at the summit of Mt. Tamdao, North Vietnam. Pollen grains were found in the alimentary canals of several specimens.

### Remarks

This new species is distinctive enough not to be confused with any other species from East Asia in having a relatively large body, a small tooth on each femur, and complex sclerites in the aedeagal internal sac. Femoral tooth is a particularly remarkable feature of the species, and not present in any other members from the region under consideration. This species somewhat resembles *C. amamianus* in having similar body maculation, a median scaly row on each elytral interval, and a habit visiting *Castanopsis* flowers. However, *C. femoralis* considerably differs from *C. amamianus* in the following characteristics: each femur armed with a small tooth, front tibiae lacking mucro at the apex in the male, and the male genitalia with a broad aedeagal body, and broad and complex endophallic sclerites. We have been unable to find any other *Coeliodes* species that are more closely related to the present new species than *C. amamianus*, but our continuing studies of many undescribed species in East Asia will elucidate the systematic position of this new species.

### Acknowledgement

We wish to express our heartfelt thanks to Dr. Katsura MORIMOTO, emeritus professor at Kyushu University, Prof. Junichi YUKAWA and Dr. Satoshi KAMITANI of the Entomological Laboratory, Kyushu University for their kind reading of the manuscript and constant guidance. Our thanks are also due to Mr. Yûichi OKUSHIMA of Kurashiki Museum of Natural History for his kind offer of invaluable specimens.

## 要 約

吉武 啓・小島弘昭：北ベトナム・タムダオ山から採集されたアカサルゾウムシ属の1新種。——北ベトナムのタムダオ山で採集されたアカサルゾウムシ属 *Coeliodes* の1新種を *C. femoralis* と命名して記載した。本種は以下の3点で同属の他種から容易に識別される。1) より大型である。2) 各腿節に1つの歯状突起を有する。3) 雄交尾器内袋の交尾片が複雑である。本種は体背面の斑紋の状態、上翅各間室に1列の鱗片を装うこと、およびシイ属の花に來集する習性で、琉球列島から記載された *C. amamianus* に似ているが、雄の前脛節末端に棘状突起を欠くことや、交尾器が幅広く、内袋に複雑で幅広い交尾片を有することから、両種は別の種群に属すると考えられる。

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