

***Falsogastrallus taichii*, a New Anobiid Species from Southwest
Japan (Coleoptera: Anobiidae: Anobiinae: Gastrallini)**

Masahiro SAKAI

Entomological Laboratory, Faculty of Agriculture, Ehime University,
3–5–7 Tarumi, Matsuyama, 790–8566 Japan

Abstract A new anobiid species, *Falsogastrallus taichii*, is described from Southwest Japan, with illustrations of salient features including male genitalia. A key to the Japanese species of *Falsogastrallus* is also presented.

The genus *Falsogastrallus* is widely distributed in Asia and Africa (ESPAÑOL, 1970; ESPAÑOL & BELLÉS, 1984). The type species, *F. sauteri* PIC, 1914, is known as a serious pest of old books and antique paper products in Asia, and was introduced into USA (FISHER, 1938). As is noticed by SAKAI (2003), the ω -shaped excavation of undersurface of head is regarded as one of the most notable feature of *Falsogastrallus*.

Through my examination of the anobiid collection preserved in Ehime University, I found a new species of *Falsogastrallus* which was a second representative of the genus from Japan. This species is non-domiciliary and collected by beating broadleaved trees such as *Quercus* spp. in the lowland of Nagasaki and Kôchi Prefectures, Southwest Japan. In the following lines this new species is described under the name of *Falsogastrallus taichii*, of which the specific epithet is in honour of the late Mr. Taichi SHIBATA, who was an amateur coleopterologist, and made a great contribution to the advancement of coleopterology in Japan.

Before going further, I wish to express my hearty thanks to Dr. Masaaki TOMOKUNI and my wife, Akemi SAKAI (formerly A. ODA) for offering specimens studied in this paper.

Falsoastrallus taichii sp. nov.

[Japanese name: Shibata-kotsutsu-shibanmushi]

(Figs. 1–7)

Length 1.5–1.7 mm, width 0.7–0.8 mm.

Male. Body elongate-oval, 2.1–2.25 times as long as wide. Color dark reddish brown to blackish brown; antennae, mouthparts, legs and usually abdominal sternites light reddish brown; sutural and apical areas of elytra less pigmented in most specimens; pronotum except for anterior marginal area sometimes infuscate. Pubescence very fine, short, appressed and moderate in density, with white sheen under a bright light.

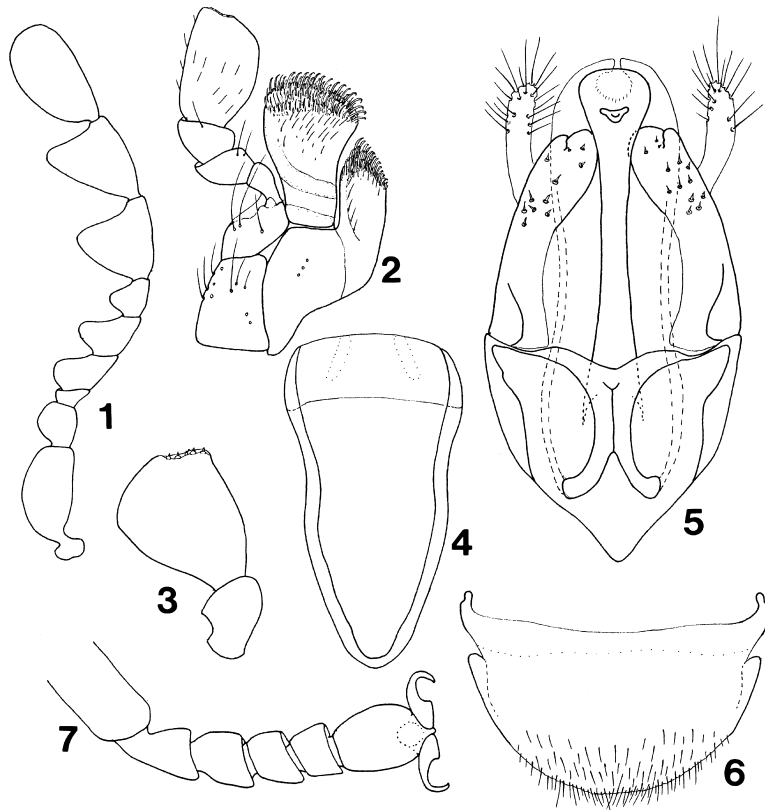
Head gently convex above, slightly wider than long; punctures fine, ocellate, moderate in density; frontoclypeal suture definite, arched dorsally. Underside of head considerably excavated as a letter “ ω ” for the reception of antennae in retraction. Eyes separated by about 1.5 times their vertical diameter. Antennae 9-segmented (Fig. 1); 1st antennomere stout; 2nd rotundate; 3rd very short, a half the length of 4th; 4th and 5th comparatively large, produced inward, widest behind the middle; 6th similar to 5th, but much smaller; 7th and 8th subtriangular; 9th oval, about 1.8 times as long as wide. Last maxillary palpomere quadrangular (Fig. 2), about 1.6 times as long as wide; apical margin somewhat obliquely truncate, with minute sensory setae bearing in outer half. Last labial palpomere subtriangularly dilated (Fig. 3); sensory setae arising from conical base, restricted in outer half on apical margin. Pronotum about 1.2 times as wide as long; sides marginate in basal 2/3; punctures on surface dual; larger punctures circular, shallow, sparse and separated on an average by nearly 0.5–2.0 times their diameter; smaller punctures microscopical. Elytra conjointly about 1.5 times as long as wide, subparallel-sided in basal 3/5; surface evenly convex; punctures dual, similar to those on pronotum in arrangement, but coarser and more confused especially at base; each elytron with a single lateral groove and short epipleural ridge.

Prosternum with semicircular depression at middle, bisected by ridge into anterior head holding plate and posterior intercoxal plate. Metasternum shining; punctures large, shallow, somewhat confused at sides and sparse at center; medio-longitudinal groove distinctly indicated in posterior half. Abdominal sternites densely punctured; punctures on 3rd (1st visible) sternite usually longitudinal-oval, and obscurer than those on sides of metasternum; 1st abdominal suture very fine, but easily traceable from side to side; 8th abdominal sternite (Fig. 6) finely pubescent, uniformly rounded at apical margin. Each claw with an angulation at base (Fig. 7).

Genitalia (Fig. 5) rather thicker than that of *F. sauteri*; median lobe also thickened, devoid of sclerotized and pigmented spines in endophallus; rod-like piece distinctly capitate at apex; lateral lobes gently incurved, provided with fine and straggly setae in apical half.

Female. Secondary sexual dimorphism indistinct, but the inner projections of antennomeres slightly weaker than those of male.

Distribution: Japan (Shikoku, Kyûshû).



Figs. 1–7. *Falsogastrallus taichii* sp. nov., male. — 1, Antenna; 2, maxilla; 3, labial palpus; 4, genital ring (9th abdominal tergite); 5, genitalia, in dorsal view; 6, pygidium (8th abdominal tergite); 7, front tarsus.

Type series. Holotype: ♂, Toishikawa, Hirado, Nagasaki Pref., 5. VI. 1979, A. ODA leg. Paratypes: 13 exs., same data as for the holotype; 5 exs., Tabira, Nagasaki Pref., 9. VI. 1979, A. ODA; 1 ex., Mt. Oodo, Kôchi Pref., 3. VI. 1971, M. TOMOKUNI.

Type depository. All specimens of the type series are preserved in the Entomological Laboratory, Faculty of Agriculture, Ehime University, Matsuyama, Japan.

Etymology. The specific name refers to the first name of the late Mr. Taichi SHIBATA who had supplied me many beetle specimens for a long term.

Remarks. This species is related to *Falsogastrallus sauteri* PIC, but it may be readily distinguishable from the latter by the infusate coloration of body, male genital structures, dermal punctation and antennal characters mentioned in the key presented below. The male genitalia of *F. sauteri* was figured by SAKAI (2003).

Key to the Japanese Species of the Genus *Falsonastrallus*

1. Antennae with funicular segments narrow; 3rd segment longer than 4th; inner projections of 4th and 5th weak. Larger punctures on pronotum relatively small and deep, with their bottoms hardly observable. Medio-longitudinal groove of metasternum so fine as to be barely detectable. Male genitalia longish; median lobe with distinct sclerotized spines in endophallus; lateral lobes abruptly incurved near apex
..... *Falsonastrallus sauteri* PIC
- Antennae with funicular segments broad; 3rd segment about half the length of 4th; inner projections of 4th and 5th strong. Larger punctures on pronotum large and shallow, with their bottoms easily observable. Medio-longitudinal groove of metasternum distinct, narrow but deep. Male genitalia short and thick; median lobe devoid of sclerotized spines in endophallus; lateral lobes gently incurved in apical half
..... *Falsonastrallus taichii* sp. nov.

要 約

酒井 雅博：西南日本から発見されたシバンムシ科の1新種 *Falsonastrallus taichii* (コウチュウ目シバンムシ科シバンムシ亜科ツツガタシバンムシ族)。—— 長崎県および高知県で採集された *Falsonastrallus* ツツガタシバンムシ属の1新種を、*Falsonastrallus taichii* シバタコツツシバンムシと名付けて記載し、その識別形質と本属の日本産種の検索表を示した。本種は、書籍害虫として著名な *Falsonastrallus sauteri* PIC ザウテルシバンムシにもっとも近縁であるが、屋外性で、触角や体背面の印刻、雄交尾器の形状などで容易に区別できる。なお本新種の種小名は、アマチュアの甲虫研究者として、日本の甲虫学の発展に多大の貢献をされた故芝田太一氏を偲んで、同氏に捧げたものである。

References

- ESPAÑOL, F. 1970. Notas sobre anóbidos. 49 Sobre el género *Falsonastrallus* PIC. *Publicaciones del Instituto de Biología Aplicada*, **48**: 33–42.
- ESPAÑOL, F., & X. BELLÉS 1984. Dos nuevos *Falsonastrallus* PIC (Col. Anobiidae) asiáticos. *Entomologische Blätter*, **80**: 26–28.
- FISHER, W. S., 1938. A new anobiid beetle (Coleoptera: Anobiidae) injurious to books. *Proceedings of the Entomological Society of Washington*, **40**(2): 43–44.
- SAKAI, M., 2003. *Mimogastrallus hideoi*, a new genus and a new species of the subfamily Anobiinae, with notes on the related genus *Falsonastrallus* (Coleoptera, Anobiidae). *Japanese Journal of Systematic Entomology, Matsuyama*, **9**: 333–338.