# A New Species of *Archaeoboreaphilus* ZERCHE (Coleoptera, Staphylinidae) from Central Kyushu, Japan

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**Abstract** A new species of the staphylinid genus *Archaeoboreaphilus* is described under the name of *A. takashii*. It is obtained from under wet dead leaves accumulated at the streamside in mountain areas of Miyazaki Prefecture, central Kyushu, Japan.

The members of the genus *Archaeoboreaphilus* ZERCHE, 1990 are usually found in dead leaves or under pebbles at the streamside. Up to the present time, seven species have been known from Japan (WATANABE, 2013, 2015). Of these, one species has been reported from both localities Hokkaido and Honshu, five species from Honshu and one species from the Sado Is. off central Honshu. However, no species of this genus has hitherto been reported from Kyushu.

Through the courtesy of Mr. Takashi WATANABE, I had an opportunity to examine an interesting species of the genus *Archaeoboreaphilus* obtained from Miyazaki Prefecture of central Kyushu, Japan. After close examination, it was become clear that this species is new to science on account of different external features and configuration of male genital organ of previously known *Archaeoboreaphilus*-species. I am therefore going to describe it as a new species in the present paper.

Before going further, I wish to express my hearty thanks to Mr. Takashi WATANABE, Fijisawa, for his kindness in providing me with the specimens used in the present study, and due to Prof. Hiroaki KOJIMA and Mr. Naoki KANEKO, Laboratory of Entomology, Tokyo University of Agriculture, for taking the photograph in this paper.

Archaeoboreaphilus takashii Y. WATANABE, sp. nov.

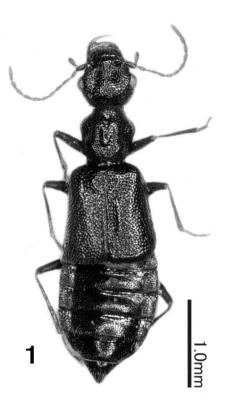
[Japanese name: Takashi-kakumune-yotsumehanekakushi]

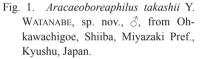
(Figs. 1-4)

Body length: 3.5–4.2 mm (from front margin of head to anal end); 2.2–2.6 mm (front margin of head to elytral apices).

Colour black and moderately shining, with labrum, labial and maxillary palpi, antennae, femora and tibiae reddish brown, mandibles and tarsi yellow.

M a l e. Head suborbicur, somewhat depressed in anterior half and gently elevated posterior half, distinctly wider across compound eyes than long (width/length = 1.32); postocular part arcuate and nearly as long as the longitudinal diameter of each eye; frons glabrous though scattered with a few coarse punctures, and with a fovea on each side of the middle just behind frontal impunctate area; surface moderately closely and coarsely punctured and pubescent, provided with a distinct depression on each side of the middle at anterior one-third; ocelli distinct, the distance between them being about twice as long as distance from outside of ocellus to the inner margin of each eye which is prominent and as long as postocular part in longitudinal diameter. Antennae moderately long, extending to the hind margin of pronotum and not thickened towards the apical segment; two proximal segments polished and remainings feebly opaque; 1st segment robust and distinctly longer than wide (length/width

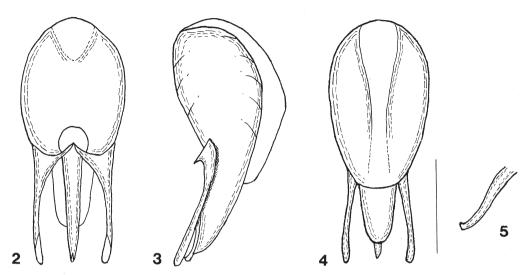




= 1.67); 2nd twice as long as wide, distinctly shorter (2nd/1st = 0.80) and narrower (2nd/1st = 0.67) than 1st; 3rd elongate, more than twice as long as wide, somewhat longer than 2nd (3rd/2nd = 1.25); 4th to 11th subequal in length and width to one another, each almost twice as long as wide; 11th the longest, four times as long as wide and twice as long as 10th, subacuminate at the apex.

Pronotum subhexagonal, nearly as long as wide, somewhat longer (pronotum/head = 1.18) though distinctly narrower than head (pronotum/head = 0.90), widest at anterior fourth and more strongly narrowed posteriad than anteriad; lateral margin arcuate and obsoletely crenulate in anterior fourth, gently emarginate and not crenulate in posterior three-fourths; anterior angles subangulate, though not visible from above, posterior ones bluntly angulate; surface more densely and more coarsely punctured than on head, provided with a shallow depression at the middle just behind anterior margin and a shallow depression at inside of each lateral margin in posterior two-thirds, also with a U-shaped shallow depression surrounding a short weak longitudinal median elevation. Scutellum small and subtriangular, surface flat and glabrous. Elytra somewhat dilated posteriad and flattened above, a little longer than wide (length/width = 1.09), markedly longer (elytra/pronotum = 1.92) and clearly wider (elytra/pronotum = 1.77) than pronotum; lateral sides almost straight, posterior margin truncate, posterior angles bluntly rounded; surface much more densely and coarsely punctured than in pronotum though covered with similar pubescence as in pronotum. Legs relatively slender, protarsi slightly widened, last segment of metatarsus slightly shorter than three preceding segments together.

Abdomen nearly parallel-sided in basal four segments and abruptly tapered towards the anal end; surface of each tergite sparingly, superficially punctured and covered with extremity fine coriaceous ground sculpture, and finely pubescent as in elytra; 4th tergite provided with a pair of small pruinose spots at the middle in front of posterior margin; 8th sternite semicircularly emarginate at the middle of posterior margin; 7th sternite slightly semicircularly depressed at the middle before posterior margin,



Figs. 2–5. Male genital organ of *Archaeoboreaphilus takashii* sp. nov. — 2, Dorsal view; 3, lateral view; 4, ventral view; 5, oblique-ventral view of the apical part of median lobe. Scale: 0.20 mm.

surface of the depression somewhat closely covered with brownish fine pubescence; 6th sternite simple.

Genital organ trilobed and symmetrical. Median lobe narrow, nearly parallel-sided in basal twothirds, and then slightly narrowed towards the apex which is acutely pointed and somewhat upturned; paramere elongate, slightly longer than median lobe, and somewhat thickened at the apical part.

F e m a l e. Similar in general appearance to male though apical two abdominal sternites simple.

*Type series*. Holotype:  $\eth$ , Ohkawagoe, Shiiba, Miyazaki Pref., Kyushu, Japan, 11.V.2016, T. WATANABE leg. Paratypes:  $4 \eth \eth$ ,  $7 \image \heartsuit$  (included one allotype), same data as for the holotype;  $2 \eth \circlearrowright$ ,  $4 \image \heartsuit$ , Mukouzakayama, Gokase, Miyazaki Pref., Kyushu, Japan, 14.V.2016, T. WATANABE leg.;  $1 \heartsuit$ , Idouchi-tõge, Nishimera, Miyazaki Pref., Kyushu, Japan, 11.V.2015, T. WATANABE leg.

*Type depositories*. The type specimens are deposited in the collection of the Laboratory of Entomology, Tokyo University of Agriculture, with the exception of three pairs of the paratypes are preserved in the private collection of Mr. T. WATANABE.

Distribution. Japan (Kyushu).

*Remarks*. The present new species is similar in general appearance to *M. nikkoensis* (K. SAWA-DA, 1964) from central and northeast Honshu, but can be distinguished from it in the following points: body black and somewhat larger; head more transverse, surface more coarsely punctured; pronotum more convex medially and more strongly uneven, each lateral side more strongly emarginate in posterior three-fourths, and provided with a more strong depression at the inner side of each emarginate part, surface less minutely and less coarsely punctured; elytra longer, surface more coarsely punctured; legs dark brown. Basal conformation of male genital organ is more similar to that of *A. iwakiensis* (Y. WATANABE, 1990) than that of *A. nikkoensis*: median lobe of the present new species is nearly parallel-sided in basal two-thirds and then slightly narrowed towards the acutely pointed and upturned apex; parameres elongate, slightly longer than median lobe.

*Bionomics*. All the type specimens were found in wet dead leaves accumulated at each streamside in three villages, Gokase, Shiiba and Nishimera, of Miyazaki Prefecture, Kyushu, Japan.

*Etymology.* The specific epithet of this new species is given after Mr. Takashi WATANABE, who collected all the specimens of the type series.

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## 要 約

渡辺泰明:九州から採集されたカクムネヨツメハネカクシ属(鞘翅目ハネカクシ科)1新種の記載. これまでカクムネヨツメハネカクシ属に含まれる種は、北海道、本州および佐渡ヶ島から7種が知られてい たが九州からの報告はなかった.最近、私は渡辺 崇氏によって九州宮崎県の3箇所から採集されたこの属 に含まれる個体を検する機会を得た.これらの個体を詳細に検討した結果、外部形態ならびに雄交尾器の形 状が既知種とは異なり未記載種と判定したので、Archaeoboreaphilus takashii sp. nov. タカシカクムネヨツメハ ネカクシと命名・記載した.

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Manuscript received 20 November 2017; revised and accepted 27 March 2018.