

## A New Genus of the Family Ciidae (Coleoptera), with Description of a New Species from the Ryukyu Islands, Southwest Japan

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**Abstract** A new genus, *Anoplocis*, is erected for the ciid beetle *Ennearthron poriae*, and a new species, *Anoplocis ryukyuensis* sp. nov. is described from Okinawa of the Ryukyu Islands, Japan. A key to the species is given.

In 1955, NAKANE and NOBUCHI described a strange species of ciid beetle under the name of *Ennearthron poriae*. Because of the 9-segmented antennae, it was originally placed in the genus *Ennearthron*, but LAWRENCE (1965, 1971) threw doubt upon this treatment in his revisional studies. After that, this species was placed by MIYATAKE (1985) in the genus *Dolichocis* without detailed comparison with other genera.

In the spring of 1994, I was able to collect a species related to *Ennearthron poriae* on a collecting trip to the Ryukyu Islands. My careful examination has revealed that the two species do not belong to any known genera and the species collected in the Ryukyus is new to science. In this paper, I am going to describe the new species, and to erect a new genus on the basis of *Ennearthron poriae*. A key will be provided to these species.

The abbreviations used herein are the same as those explained in previous papers of mine. All the type specimens to be designated in this paper are preserved in the collection of the Entomological Laboratory, College of Agriculture, Ehime University, Matsuyama.

Before going further, I wish to express my hearty thanks to Dr. M. MIYATAKE of Matsuyama, the late Dr. A. NOBUCHI, and Prof. Dr. N. OHBAYASHI and Dr. M. SAKAI of Ehime University, for their encouragement and advice. Deep gratitude is also due to Prof. Dr. S.-I. UÉNO, Tokyo University of Agriculture, for critically reading the manuscript of this paper.

### Genus *Anoplocis* nov.

Type species: *Ennearthron poriae* NAKANE et NOBUCHI, 1955.

Body narrow and cylindrical; vestiture consisting of short stout bristles. Head moderately declined, slightly covered by pronotum as seen from above; fronto-clypeal ridge slightly produced on each side, without distinct sexual modification in male;

maxilla with lacinia, labial palpus and prementum not elongate; genal ridge slightly carinate; antennal fossa shallow. Antenna 9-segmented, three terminal segments forming a loose club; terminal segment of the club provided with four sensillifers, one of which is situated at the apex. Pronotum subquadrate; lateral margins narrowly ridged, and weakly crenulate; anterior margin simple in both sexes; anterior corners angulate. Elytra parallel-sided, irregularly punctate; punctures uniform in size; suture margined posteriorly, but without apical inflexed margin. Prosternal disc in front of coxae rather flat; prosternal process rather thick, and on the same level as prosternum; procoxae subtransverse. Protibia slightly expanded apicad, outer apical angle truncate. Abdominal fovea present in male.

*Remarks.* This genus is closely related to *Orthocis* CASEY in general features, but each elytron is devoid of apical inflexed margin, maxilla with lacinia is not elongate, and the antenna is 9-segmented. Though NAKANE and NOBUCHI placed their new species in the genus *Ennearthron* because of the number of antennal segment, LAWRENCE (1965, 1971) threw doubt on its systematic position. Since he did not propose taxonomic change, however, a new genus is established herein on the basis of this peculiar species.

*Anoplocis poriae* (NAKANE et NOBUCHI, 1955), comb. nov.

[Japanese name: Poria-hime-tsutsukinokomushi]

(Figs. 1-6)

*Ennearthron* (s. str.) *poriae* NAKANE et NOBUCHI, 1955, Scient. Rept. Saikyo Univ., **2A**: 49 (1 ex., Inogashira Park, Tokyo; 21 exs., Noziri, Nagano).

*Orthocis* ? *poriae*: LAWRENCE, 1965, Bull. Mus. comp. Zool., **133**: 284.

*Ennearthron* ? *poriae*: LAWRENCE, 1971, Bull. Mus. comp. Zool., **142**: 480.

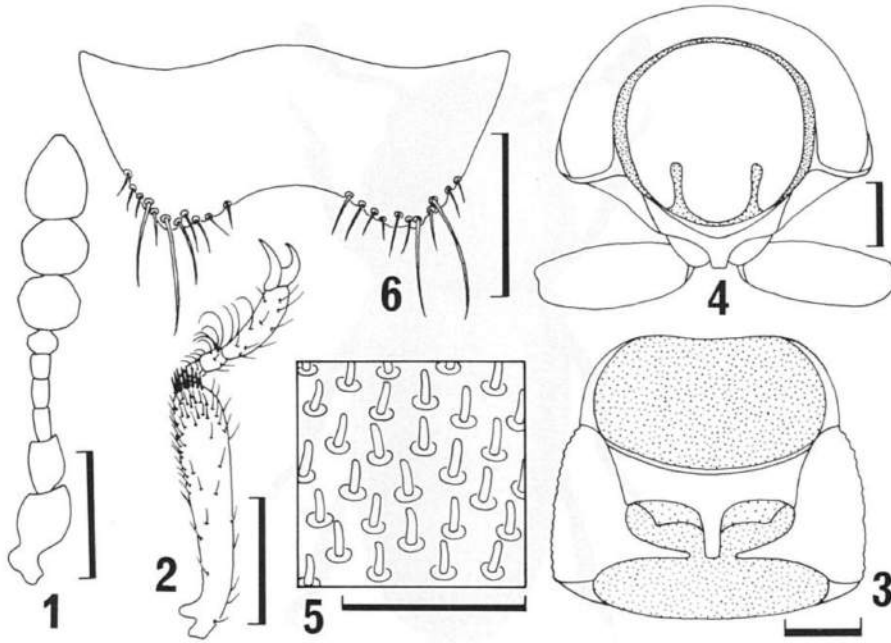
*Cis poriae*: ABDULLAH, 1973, Zool. Beitr., **19**: 221.

*Dolichocis poriae*: MIYATAKE, 1985, Coleopt. Japan Col., Osaka, **3**: 284.

*Variation in the type series and specimens from Mannô-chô, Kagawa Pref., Shikoku.*

Male (n=15)	Female (n=15)
TL (mm): 1.18-1.37 (1.25±0.06)	TL (mm): 1.23-1.45 (1.29±0.08)
EW (mm): 0.49-0.55 (0.52±0.02)	EW (mm): 0.51-0.6 (0.54±0.03)
TL/EW: 2.33-2.48 (2.41±0.05)	TL/EW: 2.32-2.48 (2.39±0.05)
PL/PW: 0.8-0.86 (0.83±0.02)	PL/PW: 0.81-0.88 (0.84±0.02)
EL/EW: 1.53-1.67 (1.62±0.04)	EL/EW: 1.57-1.66 (1.62±0.03)
EL/PL: 1.94-2.12 (2.06±0.05)	EL/PL: 2.0-2.15 (2.07±0.06)

*Specimens examined.* [Honshu] (Nagano Pref.) 1 ex., Noziri, 21-VII-1941, T. NAKANE leg. (cotype); 6 exs., same locality, 1-V-1942, T. NAKANE leg. (cotypes). [Shikoku] (Kagawa Pref.) 59 exs., forest near Hirooka Shrine, Mannô-chô, 24-26-X-1989, Y. UTSUNOMIYA leg.; 52 exs., same locality, 13-15-XII-1989, M. KAWANABE



Figs. 1-6. *Anoplocis poriae* (NAKANE et NOBUCHI), comb. nov. — 1, Antenna; 2, right protibia; 3, prothorax, ventral view; 4, prothorax, frontal view; 5, surface of pronotum; 6, eighth abdominal sternite in male. Scales for Figs. 1-5: 0.1 mm; for Fig. 6: 0.05 mm.

leg.; 21 exs., same locality, 25-VI-1990, M. KAWANABE leg. (Ehime Pref.) 1 ex., Kyôga-mori, 22-X-1968, K. ISHIKAWA leg. [Kyushu] (Nagasaki Pref.) 4 exs., Tsushima Is., Hachiman Shrine, Izuhara-chô, 9-V-1991, M. KAWANABE leg.; 3 exs., Tsushima Is., Agami-iriguchi-Uchiyama, Izuhara-chô, 10-V-1991, M. KAWANABE leg.

*Distribution.* Honshu, Shikoku, Kyushu (Tsushima Is.).

*Host fungus.* *Schizoporia paradoxa* (SCHRAD. ex FR.) DONK (Anatake in Japanese).

*Anoplocis ryukyuensis* sp. nov.

[Japanese name: Minamino-poria-hime-tsutsukinokomushi]

(Figs. 7-10)

*Male* (Holotype). Body length (excluding head): 1.12 mm; greatest breadth of elytra: 0.49 mm.

Body narrowly elongate and cylindrical, 2.31 times as long as elytral breadth, somewhat strongly convex. Color black; antennal funicles, palpi and legs yellowish brown, antennal clubs somewhat darker. Punctures on dorsum each bearing a short, robust, suberect and yellowish seta.

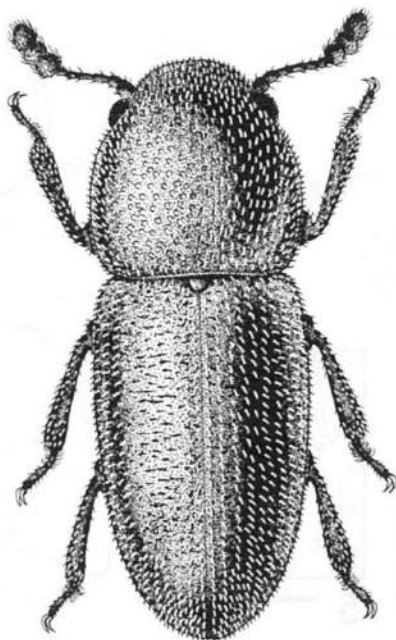


Fig. 7. *Anoplocis ryukyuensis* sp. nov., male.

Head weakly convex, slightly and transversely depressed from side to side between eyes, rather closely and finely punctate, finely reticulate, covered with setae which are slightly finer than those on pronotum and elytra; fronto-clypeal ridge weakly produced forward and forming small arcuate lamella on each side, though flat in the middle of clypeus. Third antennal segment 1.36 times as long as 4th.

Pronotum 0.77 times as long as broad; anterior margin not ridged, gently rounded; anterior corners obtusely angulate, forming an angle of about  $130^\circ$ , not protruding beyond the anterior margin in lateral view; lateral margins narrowly ridged, finely crenulate, entirely visible from above; sides nearly subparallel though weakly arcuate in dorsal view; posterior margin narrowly ridged, and weakly arcuate; posterior angles nearly rounded; dorsum irregularly and somewhat closely punctate; punctures uniform in size, shallow, somewhat umbiliform, separated by a distance about 1.5 to 2.5 times their diameters; interstices between punctures finely shagreened. Scutellum small, semicircular, rugulose. Elytra elongate, 1.56 times as long as broad, and 2.07 times as long as pronotum; sides subparallel though weakly divergent from base to the middle, then gradually convergent toward apices; surface covered with setae which are sometimes seriate, closely and irregularly punctate; punctures very small and inconspicuous, considerably smaller than those on pronotum; interstices between punctures rugulose; suture narrowly margined but without inflected area at apex.

Prosternal disc in front of coxae slightly tumid medio-longitudinally, shallowly and transversely depressed just before each coxa; prosternal process broad, subparallel-sided, on the same level as the base of pronotum. First abdominal sternite with a large, oval and somewhat inconspicuous pubescent fovea in the middle.

Eighth abdominal sternite a little wider than long, with the apical margin slightly emarginate, armed with mixed long and short setae on lateral projections, devoid of setae at the bottom of the emargination. Tegmen rather stout, subparallel-sided, apical area divided into two broad lobes.

*Female.* First abdominal sternite devoid of pubescent fovea.

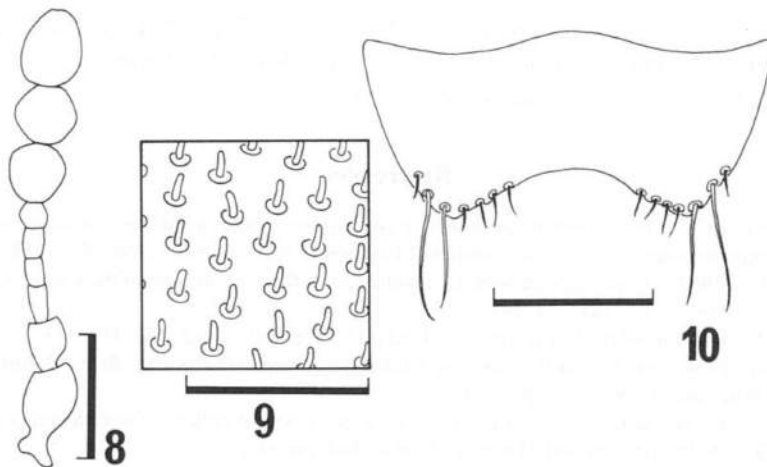
*Variation in the type series.*

Male (n=3)	Female (n=7)
TL (mm): 1.11–1.16 (1.14±0.02)	TL (mm): 0.96–1.23 (1.11±0.08)
EW (mm): 0.49–0.5 (0.49±0.01)	EW (mm): 0.42–0.53 (0.48±0.03)
TL/EW: 2.28–2.39 (2.33±0.04)	TL/EW: 2.23–2.33 (2.29±0.04)
PL/PW: 0.77–0.8 (0.79±0.02)	PL/PW: 0.76–0.81 (0.79±0.02)
EL/EW: 1.53–1.58 (1.56±0.02)	EL/EW: 1.51–1.58 (1.54±0.02)
EL/PL: 1.97–2.07 (2.04±0.04)	EL/PL: 2.0–2.23 (2.08±0.07)

*Type series.* Holotype: ♂, Hiji-ôtaki Falls, Kunigami-gun, Okinawa-hontô Is., 19–IV–1994, M. KAWANABE leg. Paratypes: 1 ♂, 7 ♀♀, same data as holotype; 1 ♂, Kanna, Ginoza-son, Kunigami-gun, Okinawa-hontô Is., 20–VII–1993, M. KIMURA leg. All the specimens of the type series are preserved in the collection of the Entomological Laboratory, College of Agriculture, Ehime University, Matsuyama.

*Distribution.* Ryukyu Islands (Okinawa-hontô Is.).

*Host fungus.* *Schizoporia paradoxa* (SCHRAD. ex FR.) DONK (Anatake in Japa-



Figs. 8–10. *Anoplocis ryukyuensis* sp. nov. — 8, Antenna; 9, surface of pronotum; 10, eighth abdominal sternite in male. Scales for Figs. 8–9: 0.1 mm; for Fig. 10: 0.05 mm.

nese).

*Remarks.* This new species is closely allied to *A. poriae* in general features, but in the latter the anterior corner of pronotum is slightly protrusive and the punctuation of pronotum is denser.

### Key to the Japanese Species of the Genus *Anoplocis*

1. Body dark brown. Pronotum with anterior corners slightly protruding beyond the anterior margin in lateral view; punctures on dorsum denser, separated by a distance about 1 to 1.5 times their diameters; PL/PW usually more than 0.81. . . . . *A. poriae*
- Body black. Pronotum with anterior corners not protruding beyond the anterior margin in lateral view; punctures on dorsum sparser, separated by a distance about 1.5 to 2.5 times their diameters; PL/PW usually less than 0.8. . . . . *A. ryukyuensis* sp. nov.

### 要 約

川那部 真：ツツキノコムシ科の1新属ならびにこれに所属する琉球列島産の1新種。——中根と野淵によって、*Ennearthron poriae*の名で1955年に命名記載されたポリアヒメツツキノコムシは、当時の属の定義から触角の節数が9節であることをおもな根拠にして、*Ennearthron*属に含められた種である。LAWRENCE (1965, 1971)は、世界各地の種を広範に検討する過程で、本種が*Ennearthron*属に含まれていることに疑問を投げかけたが、その帰属についてはとくに言及しなかった。その後、*Dolichocis*属のものとして扱われているが(宮武, 1985)、真の所属は未検討のまま残されている。筆者は、本種に酷似した1新種を、1994年に琉球列島で発見し、ポリアヒメツツキノコムシとあわせて近縁の属の種と詳細に比較検討した結果、既知のいずれの属にも含まれない独自の属を形成するものと認めた。そこで新属*Anoplocis*を創設して、*Ennearthron poriae*を*Anoplocis poriae*に変更し、琉球列島で発見された1新種はミナミノポリアヒメツツキノコムシ*Anoplocis ryukyuensis*と新しく命名して記載した。

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