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Author(s)	BABA,Katsuyoshi; MATSUKAWA,Masaki
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Anodonta kobiwakoensis (Bivalvia, Unionidae), a new replacement name
for *Cucullaea ponderosa* Yokoyama, 1925

Katsuyoshi BABA* and Masaki MATSUKAWA**

Department of Environmental Sciences

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Abstract

From the ICZN4 rule, the specimen described previously as *Cucullaea ponderosa* Yokoyama, 1925 is renamed as *Anodonta kobiwakoensis* nom. nov.

Key words: replacement name, bivalvia, Unionidae, Kobiwako Group, Shiga

Department of Environmental Sciences, Tokyo Gakugei University, 4-1-1 Nukuikita-machi, Koganei-shi, Tokyo 184-8501, Japan

Introduction

Cucullaea ponderosa was described basing on the material from the Kobiwako Group of Shiga Prefecture in 1925 (Yokoyama, 1925). The species was subsequently replaced as *Anodonta ponderosa* by Kuroda in 1931. However, *Anodonta ponderosa* (Yokoyama, 1925) was preoccupied by other species, and should be treated as an invalid name, because C. Pfeiffer (1825) gave the name of *Anodonta ponderosa* to specimens from Germany. Subsequently, Haas (1969) classified *Anodonta ponderosa* (C. Pfeiffer (1825)) as a junior synonym of *Mytilus cygnea* (Linnaeus, 1758), and redefined them as *Anodonta cygnea* (Linnaeus, 1758). Therefore, we propose *Anodonta kobiwakoensis*, a new replacement name for *Cucullaea*

ponderosa Yokoyama, 1925

Systematic description

The illustrated specimen of *Anodonta kobiwakoensis* are deposited in the University Museum at University Tokyo (UMUT). Measured parts of specimens are exemplified by symbol as L, H, and T for shell length, shell height, and shell thickness.

Class: Bivalvia Linnaeus, 1758

Subclass: Palaeoheterodonta Newell, 1965

Order: Unionoida Stoliczka, 1871

Superfamily: Unionacea Fleming, 1828

Family: Unionidae Fleming, 1828

* Faculty of Education, Gifu Shotoku Gakuen University, Gifu 501–6194, Japan

** Department of Environmental Sciences, Tokyo Gakugei University, Koganei, Tokyo 184–8501, Japan

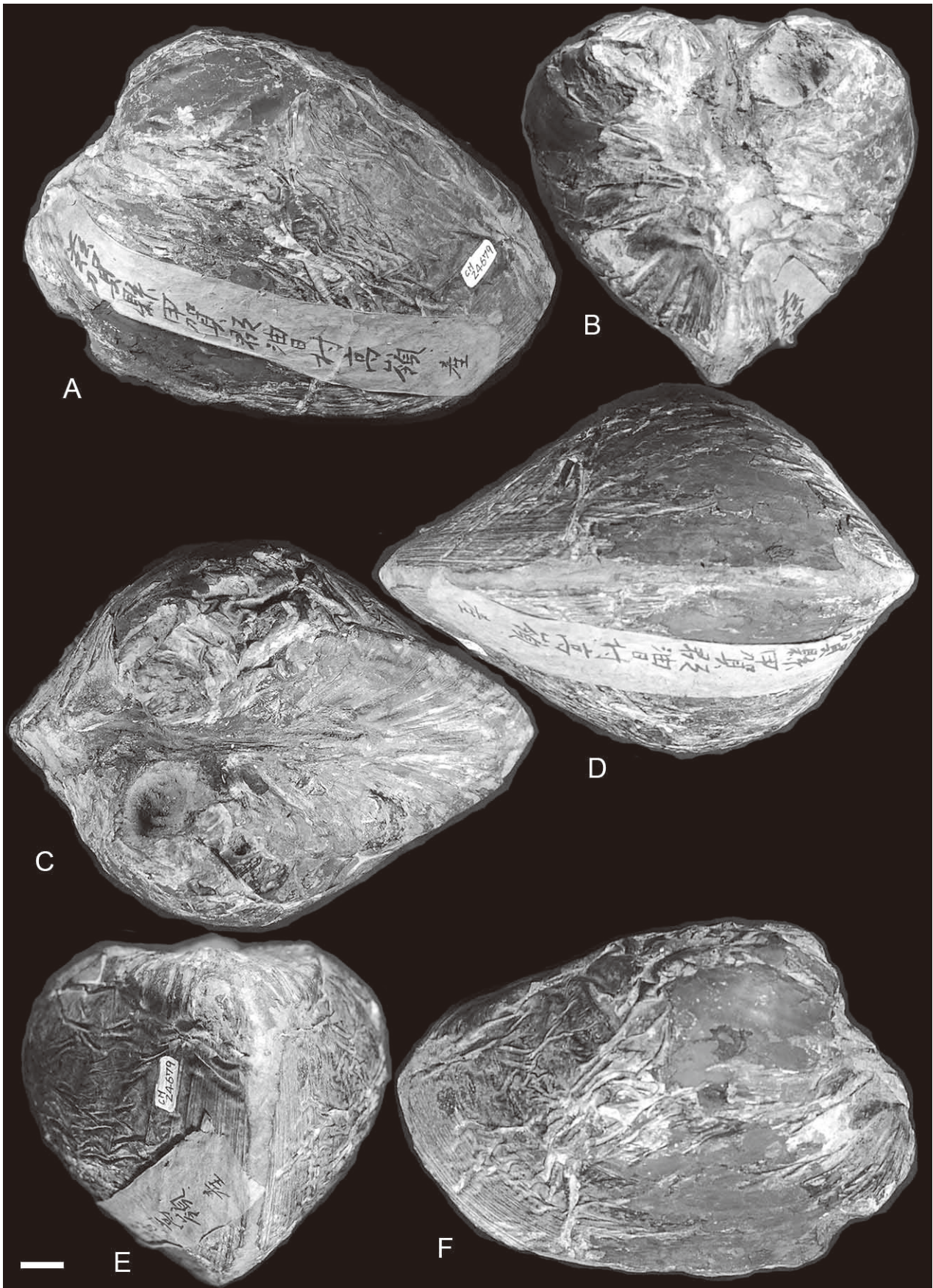


Fig. 1. *Anodonta kobiwakoensis* nom. nov. from the Koka Formation (Takamine), the Kobiwako Group, in Koka Town, Shiga Prefecture. A-F, UMUT-CM24679 (Holotype), lateral view of left valve (A), anterior view (B), dorsal view (C), ventral view (D), posterior view (E) and lateral view of right valve (F). Scar bar shows 1 cm.

Subfamily: Anodontinae Ortmann, 1910

Genus: *Anodonta* Lamarck, 1799

Anodonta kobiwakoensis nom. nov.

1925. *Cucullaea ponderosa* Yokoyama, p. 7-8, pl. 7.

1931. *Anodonta ponderosa* (Yokoyama); Kuroda, appendix p. 74

Derivation of name. Meaning from the Kobiwako Group. After Prof. Matajiro Yokoyama, who studied our collection initially, from the Kobiwako Group, at Takamine, Aburahi-mura, Koka-gun, Shiga Prefecture, where is the present Takamine, Koka City, Shiga Prefecture.

Material. Holotype, is UMUT-CM24679 (D. Sato, Coll.) from the Koka Formation of the Kobiwako Group.

Dimensions (in cm except for L/H). Length is 12.2 cm, height is 8.3 cm, thickness is 8.62 cm, and L/H is 1.47.

Diagnosis. Very swollen *Anodonta* without wing, showing T/L and T/H ratios are 0.38 and 0.55, respectively.

Description. Shell medium-sized, equivalve, very inequilateral, trigonally suboval, very swollen; length longer than height; umbo large, strongly prosogyrate orthogyrouse; antero-dorsal margin short, somewhat concave, passing gradually into anterior dorsal margin; postero-dorsal margin long, gently curved, forming obtuse angle at the junction with the siphonal margin; siphonal margin rounded; ventral margin forms broad arch; surface marked with fine concentric plications.

Remarks. Yokoyama (1925) proposed the new species *Cucullaea ponderosa*, including the material of the present specimen. Kuroda (1931) subsequently designated *Cucullaea ponderosa* Yokoyama, 1925 as *Anodonta ponderosa* (Yokoyama, 1925) (Kuroda, 1931, appendix p. 74). Then, Kuroda (1931) pointed out that *A. ponderosa* (Yokoyama, 1925) is allied to *Anodonta calipygos* (Kobelt, 1879, p.151, pl. 19, fig. 1) from the present Lake Biwa, Japan. Based on the ICZN4 (Article 23. Principle of Priority), *Anodonta ponderosa* (Yokoyama, 1925) (Kuroda, 1931, appendix p. 74) should be treated as an invalid name, because C. Pfeiffer (1825) gave the name of *Anodonta ponderosa* to specimens from Germany. Subsequently, Hass (1969) classified *Anodonta ponderosa* (C. Pfeiffer (1825)) as a junior synonym of *Mytilus cygnea* (Linnaeus, 1758), and redefined them as *Anodonta cygnea* (Linnaeus, 1758).

The present species differs from *Anodonta calipygos* (Kobelt, 1879, p.151, pl. 19, fig. 1) from present Lake Biwa

in possessing very swollen shell and without weak wing behind umbo.

Because of its non-marine occurrence and shell characters, the holotype of *C. ponderosa* Yokoyama, 1925 belongs to the genus *Anodonta*. As *Anodonta ponderosa* is an invalid name, we propose that the specimen of *C. ponderosa* Yokoyama, 1925 is classified as *Anodonta kobiwakoensis* nom. nov.

Occurrence. Pliocene. Koka Formation of the Kobiwako Group.

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Cucullaea ponderosa Yokoyama, 1925 に対する新置換名の
Anodonta kobiwakoensis (Bivalvia, Unionidae)

馬 場 勝 良・松 川 正 樹

環境科学分野

要 旨

滋賀県の古琵琶湖層群から新種として記載された *Cucullaea ponderosa* Yokoyama, 1925 は, *Cucullaea* 属から *Anodonta* 属への変更に伴い, *Anodonta ponderosa* と置換されるが, *Anodonta ponderosa* C. Pfeiffer, 1825 は *Mytilus cygnea* Linnaeus, 1758 の junior synonym とされたので, *Anodonta kobiwakoensis* なる新置換名を与えた。

キーワード: 新置換名, *Anodonta kobiwakoensis*, *Cucullaea ponderosa*, 二枚貝, Unionidae, 古琵琶湖層群, 滋賀県