

New Land and Freshwater Snails (Mollusca) from Japan

By

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During his research on land and freshwater snails, several new species were found by the writer from various localities of Japan. In this paper, three of them will be described. The writer wishes to express his sincere thanks to Messrs. Hitoshi MURAYAMA, Eiichi SORITA and Seiichiro TAKAHASHI who offered him the type material of these new species.

Chamalycaeus takahashii sp. nov. (Alycaeidae)

(Figs. 4-5)

Shell rather large for the genus, ashy white, thick and solid, depressed and with a low conic spire of 4 whorls. Whorls well rounded and gradually increasing their diameter from the apex to the aperture. Suture distinctly and deeply impressed. Embryonic whorls about 1.5 in number, smooth and polished, glassy and translucently white. Teleoconch whorls 2.5 in number, striated by densely set lamellate growth riblets. The last quarter whorl descending to oblique aperture, rather smooth and strongly constricted at the neck and strongly ridged and solute near the aperture. Air-breathing tube narrow and rather long, running backwards along the suture. Umbilicus widely perforated, all whorls visible in it. Aperture shortly protruding, oblique forwards and rather circular, with a weak sinuation at the inner margin. Peristome thick and slightly expanded and reflexed.

Height 2.6 mm, large diameter 4.7 mm and small diameter 3.8 mm (figured holotype specimen preserved in the National Science Museum, NSMT-Mo 52661).

Height 2.5 mm, large diameter 4.8 mm and small diameter 3.9 mm (figured paratype specimen, NSMT-Mo 52662).

Type-locality. Onagara-dô Cave, Honjô-mura, Minamiamabe-gun, Ôita Pref., Kyushu.

Remarks. This new species differs from *Chamalycaeus satsumanus* (PILSBRY, 1902) and its allied species found in Kyushu district in having larger shell with a strong ridge behind the aperture. *Chamalycaeus kurodai* (PILSBRY, 1908) from the Quelpart Island between Korea and Kyushu is the nearest ally to this new species in general features, but differs from the latter in having light brown shell with rounded ridge just behind the quite circular aperture, solute from the penultimate whorl.

Gyraulus soritai sp. nov. (Planorbiidae)

(Figs. 6–9)

Shell small, thin but rather solid, translucently corneous brown, planorboid in shape, and with 4 whorls gradually increasing their breadth from the apex to the aperture. Whorls convex, with distinctly impressed sutures. Early whorl slightly elevated, not sunk. Body whorl inflated with rounded periphery. Umbilicus widely open, all whorls visible in it. Aperture widely lunate, oblique forwards. Outer margin thin, simple and roundly arcuate.

Height 0.9 mm and breadth 2.8 mm (figured holotype specimen preserved in the National Science Museum, NSMT–Mo 52650).

Height 0.9 mm and breadth 2.9 mm (figured paratype specimen, NSMT–Mo 52651a).

Height 0.9 mm and breadth 2.9 mm (figured paratype specimen, NSMT–Mo 52651b).

Height 0.9 mm and breadth 2.8 mm (figured paratype specimen, NSMT–Mo 52651c).

Type-locality. Marsh at Shinden, Gyôda City, Saitama Pref., Honshu.

Remarks. This new species has also been collected from Sagamihara, Kanagawa Pref., Honshu. This is a recognized species in having the planorboid shell with a quite slightly elevated apex and colored in light corneous brown, superficially resembling the land snail, *Zonitoides arboreus* (SAY) in shape and color. Therefore, this new species is easily distinguished from all the other Japanese gyraulid species.

Euhadra murayamai sp. nov. (Bradybaenidae)

(Figs. 1–3)

Shell small to medium in size for the genus, thin but rather solid, sinistral, planorboid in shape, with hardly elevated spire of 5.5 whorls. Surface white and covered with pale yellowish periostracum. Body whorl with blackish brown suprapheripheral band and umbilical patch. Pale brownish hyposutural and basal bands exist in some specimens. Body whorl also with an obtusely angular periphery reducing and rounding to the aperture and with swollen base. Umbilicus widely and deeply perforated with steep wall. Aperture widely lunate and oblique forwards. Peristome thickened and slightly expanded and reflexed.

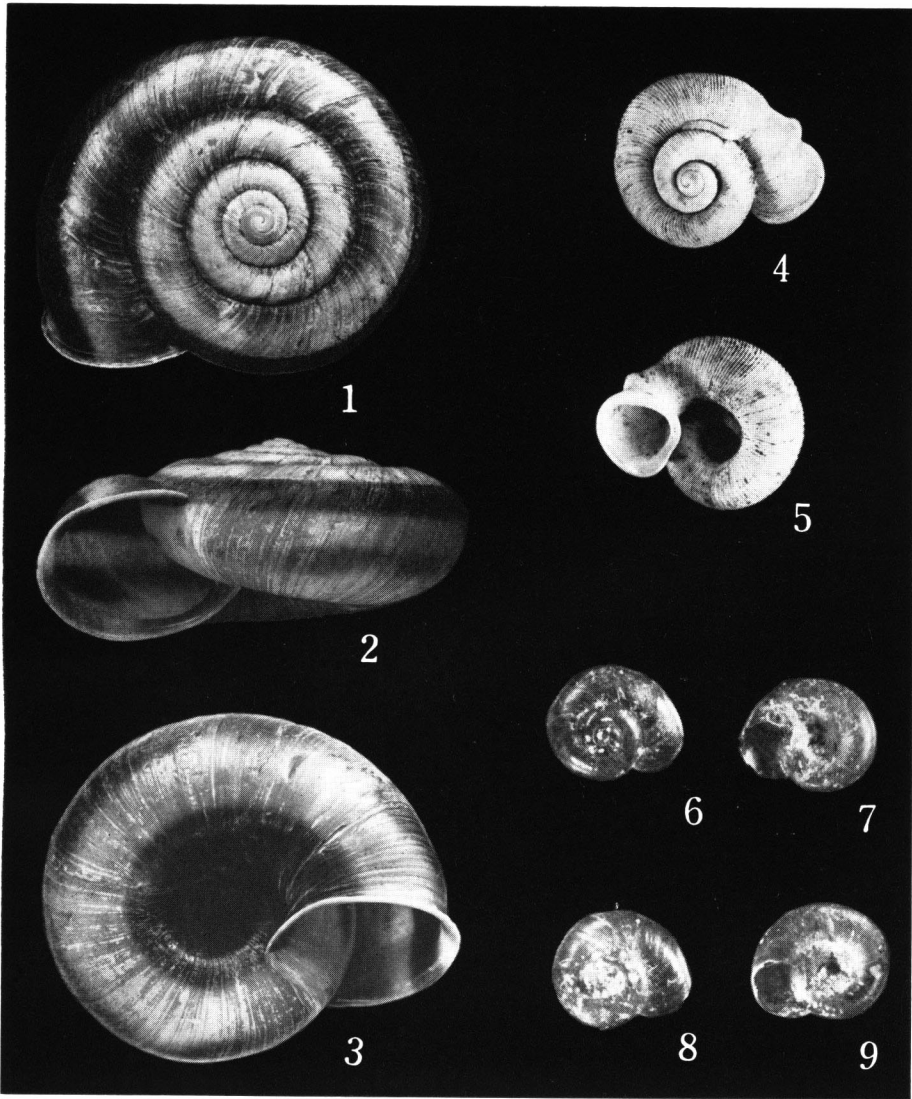
Height 18.5 mm and breadth 37.6 mm (figured holotype specimen preserved in the National Science Museum, NSMT–Mo 52664).

Height 12.8 mm and breadth 30.7 mm (paratype specimen, NSMT–Mo 52663a).

Height 15.4 mm and breadth 32.5 mm (paratype specimen, NSMT–Mo 52663b).

Type-locality. Summit of Mt. Myôjô (limestone area), Itoigawa City, Niigata Pref., Honshu, about 500 m in elevation.

Remarks. This new sinistral species is characterized by the strongly depressed



Figs. 1-9. — 1-3. *Euhadra murayamai* sp. nov. (holotype specimen). — 4. *Chamalycaeus takahashii* sp. nov. (holotype specimen). — 5. Same species (paratype specimen). — 6. *Gyraulus soritai* sp. nov. (holotype specimen). — 7-9. Same species (paratype specimens).

shell with planorboid spire, which differs from those of all the other sinistral species of the genus *Euhadra*. The color pattern of this species is somewhat similar to that of *Euhadra quesita* (DESHAYES, 1850) in having distinct suprapерipheral band and umbilical patch and indistinct hyposutural and basal bands. However, no intermediate forms between them are found anywhere.

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