

AMPHIBIA AND REPTILIA COLLECTED FROM TOKARA ISLANDS*

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From 26th of May to 12th of June, 1953, the Osaka Museum of Natural History made a scientific survey to the Tokara Islands, which lie in a series, southwest of Kyushu, between Yakushima and Amami-oshima. During those days one species of amphibians and ten species of reptiles were collected from two islands, Takara-jima and Nakano-shima by Mr. Yoshitaka TSUTSUI, director of the museum, Mr. Hiroshi KONO, Mr. Shun-ichi UENO and people of the islands. These specimens were delivered to the present author for identification.

Before going further, the author wishes to express his hearty thanks to all the members of the party mentioned above.

AMPHIBIA

1. *Rhacophorus japonicus* (HALLOWELL, 1860)

Rhacophoridae

1860, *Ixalus japonicus* HALLOWELL, Proc. Phila. Acad., 1860, p. 501.

Japanese name: Nihon-Kajika-gaéru

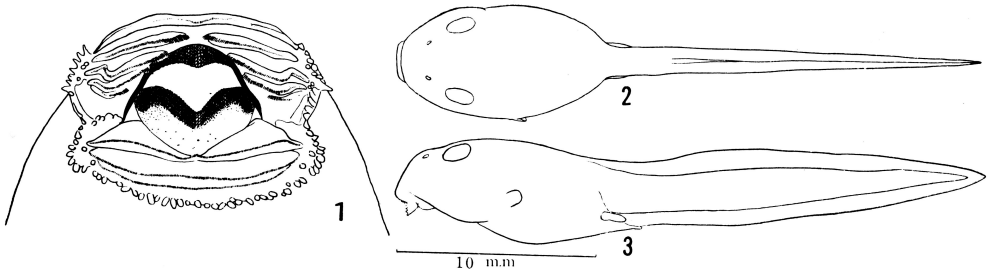
Materials: 7 exx. from Takara-jima, 26-May~1-June-1953, Y. TSUTSUI leg, (OMNH. Am-34~40.); 2 exx. from Nakano-shima, 10-June-1953, Y. TSUTSUI leg, (OMNH. Am-41, 42.); 5 tadpoles from Nakakano-shima, 10-June-1953, Y. TSUTSUI leg, (OMNH. Am-74~78).

Description of tadpoles: Head-body in dorsal aspect elliptical; ratio of length of head-body to that of tail, 1:1.8~2.1; depth of head-body slightly less than width; ventral surface of body with iridescence even in preserved specimen.

Tail long, tail tip acuminate, ratio of greatest depth of tail to its own length, 1:5.1~5.5; dorsal and ventral fin low, greatest depth of ventral fin decidedly less than dorsal fin.

Eye nearer to lateral outline in dorsal aspect than to mid-dorsal line. Nostril nearer to eye than to tip of snout; internasal space narrower than interorbital space.

* Contribution from the Osaka Museum of Natural History, no. 58.
Scientific Survey of the Tokara Islands, Report no. 37.



Figs 1~3 Tadpole of *Racophorus japonicus* (No. Am-74), from Nakano-shima
1, Mouth part; 2, dorsal view; 3, lateral view.

Spiracle sinistral, directed obliquely upward and backward, its base nearer to eye than to bud of leg; opening of spiracular elliptical, and visible from dorsal.

Anus dextal, opening on level of edge of ventral fin.

Labial formula $\frac{1:4+4}{3}$ or $\frac{1:3+3}{3}$. Upper labium fringed with teeth, longer than width of upper mandible (about 1 1/2 times mandible); lateral segment of second teeth row about 5/9 length of first upper row; median space between two segments of second row narrow, about 1/4 length of one segment; lateral segment of third row slightly shorter than segment of second row, and so progressively shorter to fourth; segment of fifth row very short (if present).

Lower labium has three undivided rows, first and second about equal and third row shorter.

Notes: TOKIOKA (1953) reported that tadpoles of this species were commonly found in shallow pools near the shore of Takara-jima, these pools keeping fresh water in the surface and brackish water in the bottom.

Up to the present, salamanders have not yet been reported from the Tokara Islands, excepting that an egg sac of *Cynops* sp. (Salamandridae) was found by Mr. S. UÉNO in "Sokonashi-ike", a small marshy lake on Nakano-shima, although it was not preserved.

There are two species (or two subspecies) of *Cynops* in Japan. *C. pyrrhogaster* (BOIE) is distributed in main islands of Japan except Hokkaido; southward reaches Yakushima, Kyushu. On the other hand, *C. ensicandus* (HALLOWELL) is distributed in the Ryukyu Archipelago; the northern limit is Amami-oshima. The Tokara Islands are situated between the distribution ranges of both species. Nakano-shima is about 70 km southwest from the southern limit of *C. pyrrhogaster*, and about 150 km northeast from the northern limit of *C. ensicandus*. Therefore, from zoogeographical point of view, it is desired to elucidate what species of *Cynops* is in Nakano-shima.

REPTILIA

2. *Gekko japonicus* (DUMÉRIL et BIBRON, 1836)

Gekkonidae

1836, *Platydictylus japonicus* DUMÉRIL et BIBRON, *Erpét. Gén.*, 3, p. 337.*Japanese name*: Yamori.*Materials*: 2 exx. from Takara-jima, 26-May~1-June-1953, (OMNH. R-21, 22).3. *Eumeces marginatus* (HALLOWELL, 1860)

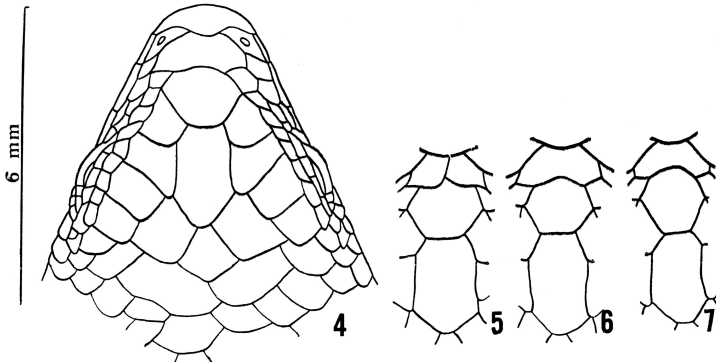
Scincidae

1860, *Plestiodon marginatus* HALLOWELL, *Proc. Phila. Acad.*, 1860, p. 492.*Japanese name*: Okinawa-tokagé.*Materials*: 7 exx. from Takara-jima, 26-May~1-June-1953, Y. TSUTSUI leg, (OMNH. R-14~20).Table 1, Scale characters of *Eumeces marginatus* from Takara-jima.

No.	Age	Scale rows in mid-body	Postnasal	Supraoculars (touch frontals)	Supra-ciliaries	Labials		Nuchals
						upper	lower	
R-14	young	24	absent	4(3)	right 6 left 7	7	7	one pair
R-15	young	24	do	4(3)	7	7	7	do
R-16	adult	25	do	4(3)	7	7	7	do
R-17	adult	24~25	do	4(3)	right 6 left 8	7	7	do
R-18	adult	26	do	4(3)	8	7	right 8 left 7	do
R-19	adult	24	do	4(3)	7	7	7	do
R-20	adult	24~25	do	right 4(3) left 3(2)	7	7	7	do

4. *Ateuchosaurus pellopleurus* (HALLOWELL, 1860)

Scincidae

1860, *Lygosaurus pellopleurus* HALLOWELL, *Proc. Phila. Acad.*, 1860, p. 496.*Japanese name*: Heriguro-himé-tokagé.Figs. 4~7 *Ateuchosaurus pellopleurus* from Takara-jima.

4, Head (No. R-4); 5-7, frontal parts (Nos. R-1, R-2, R-3).

Materials: 4 exx. from Takara-jima, 26-May~1-June-1953, Y. TSUTSUI leg, (OMNH. R-1~4).

Notes: Frontal entirely divided in all specimens.

5. *Takydromus smaragdinus* BOULENGER, 1887

Lacertidae

1887, *Takydromus smaragdinus* BOULENGER, Cat. Liz. Brit. Mus., 3, p. 509.

Japanese name: Ao-kanahebi.

Materials: 9 exx. from Takara-jima, 28-May-1953, H. KONO leg. (OMNH. R-5~13).

6. *Typhlops braminus* (DAUDIN, 1803)

Typhlopidae

1803, *Eryx braminus* DAUDIN, Hist. Nat. Rept., 7, p. 279.

Japanese name: Mekura-hebi.

Materials: 4 exx. from Takara-jima, 29-May-1953, S. UENO leg. (OMNH. R-55~58).

7. *Opheodrys semicarinata* (HALLOWELL, 1860)*

Colubridae

1860, *Eurypholis semicarinatus* HALLOWELL, Proc. Phila. Acad., 1860, p. 493.

Japanese name: Ryukyu-ao-hebi.

Materials: 4 exx. from Takara-jima, 26-May~1-June-1953, (OMNH. R-32~34, R-83).

Table 2, Several external characters of *Opheodrys semicarinata* from Takara-jima.

No.	Sex	Length of body and tail (mm.)	Formula of 1) upper labial	No. of scale rows in mid-body	No. of ventrals	Shape of anal scale	No. of sub-caudals left/right
R-32	♀	422 110	3-2-3	15	175	divided	72/73
R-33	♀	428 137	3-2-3	15	171	do	69/69
R-34	♀	492 81+n	3-2-3	15~16	175	do	38/38+n
R-83	♂	433 94	right 3-2-4 left 3-2-3	18~20 ²⁾	173	do	74/76

1) the middle figure of each formula indicates the number of labials touching the eye.

2) irregular.

* Formerly, this species was classified into two subspecies, ssp. *semicarinata* HALLOWELL and ssp. *fritzi* MAKI, which distinguished from each other in ventral numbers. MAKI (1931) reported the former from Okinawa Is. and the latter from Amami Oshima.

TAKARA (1957), who examined many individuals from twelve islands, including Okinawa Is., Amami Oshima and Takara-jima, found that the each series of specimens have the similar range of ventral numbers.

8. *Laticauda semifasciata* (REINWARDT, 1837)

Hydridae

1837, *Platurus semifasciatus* REINWARDT, in Schlegel, Phys. Serp., 2, p. 516.*Japanese name*: Erabu-umi-hebi.*Materials*: 2 exx. from sea shore of Takara-jima, 26-May~1-June-1953, (OMNH. R-50~51).Table 3, Several external characters of *Laticauda semifasciata* from Takara-jima.

No.	Sex	Length of body and tail (mm.)		Formula of upper labial	Scale rows in mid-body	No. of ventrals	Shape of anal scale	No. of sub-caudals left/right
R-50	♀	439	69	2-2-3	23	202+2/2 ¹⁾	divided	40/40
R-51	♀	349	51	2-2-3	23	201+4/4 ²⁾	do	35/36

1), 2) paired scales.

9. *Emydocephalus ijimae* STEJNEGER, 1898

Hydridae

1898, *Emydocephalus ijimae* STEJNEGER, Journ. Sci. Coll. Tokyo, 12, Pt. 3, p. 223.*Japanese name*: Ijima-umi-hebi.*Materials*: 3 exx. from sea shore of Takara-jima, 26-May~1-June-1953, (OMNH R-52~54).Table 4, Several external characters of *Emydocephalus ijimae* from Takara-jima.

No.	Sex	Length of body and tail (mm.)		Formula of upper labial	No. of scale rows in mid-body	No. of ventrals	Shape of anal scale	No. of Subcaudals
R-52	♀	363	59	right 1-1-2 left 1-1-1	19	142	divided	26
R-53	♀	812	108	1-1-1	17	140	do	21
R-54	♀	712	98	1-1-1	17	138	do	21

10. *Trimeresurus flavoviridis tokarensis* (NAGAI, 1928)*

Crostaridae

1928, *Trimeresurus tokarensis* NAGAI, Kagoshima-ken Hakubutsu Chōsa (Rep. Nat. Hist., Kagoshima Pref.), 3, p. 6.*Japanese name*: Tokara-habu.*Materials*: 5 exx. from Takara-jima, 26-May~1-June-1953, (OMNH. R-40~44).

* This subspecies is endemic in Takara-jima and Ko-takara-jima Islet.

Table 5, Several external characters of *Trimeresurus flavoviridis tokarensis* from Takara-jima.

No.	Sex	Length of body and tail (mm.)	No. of upper labial ¹⁾	Scales between supraoculars	No. of scale rows in mid-body	No. of ventrals	Shape of anal scale	No. of subcaudals left/right
R-40	♀	773 137	8	13~14	31	206	entire	69/69+6 ³⁾
R-41	♀	682 123	8	11	31	200	do	69/69+3 ⁴⁾
R-42	♀	741 113+n	8	11~12	31	203	do	51/51+n
R-43	♀	626 121	8	12	31	205	do	73/74
R-44	♀	801 143+n	8	11	31	205+(1 or 2) ²⁾	do	73/73+n

1) one scale (3rd) touches subocular in all specimens.

2) partly broken. 3), 4) unpaired scales in tail end.

11. *Eretmochelys imbricata* (LINNAEUS, 1766)

Chelonidae

1766, *Testudo imbricata* LINNAEUS, Syst. Nat. 1, p. 350.

Japanese name: Taimai.

Material: 1 ex. from Ko-takara-jima Islet, near Takara-jima. 30-May-1953, (OMNH. R-74).

Pond turtle, *Clemmys mutica* (CANTOR), known from Akuseki-jima of the islands.

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