SCIENCE REPORT OF THE YOKOSUKA CITY MUSEUM, No. 11
March, 1965

Notes on *Eumeces okadae* STEJNEGER from Izu Island, Japan.

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(with 1 table, 2 figs. and 1 plate)

オカダトカゲ *Eumeces okadae* STEJNEGER について

松　井　孝　爾

Introduction

The first specimens of *Eumeces okadae* were collected by S. OKADA in the Izu Islands in 1887. They were described and named *Eumeces latiscutatus okadae* by STEJNEGER in 1906. STEJNEGER had nine specimens from two of the islands, Miyakejima and Niijima. Those specimens were measured by E. H. TAYLOR in 1935, and established as a distinct species *E. okadae*. To my knowledge, this is the only record of the measurements of *E. okadae*.

Since 1962 I have had the opportunity to examine and identify both alive and preserved specimens of *E. okadae*, these were collected by Father Richard C. Goris, his students, and others. This paper deals with observations based upon these 31 new specimens of this species.

I wish to express my sincere gratitude to Father Richard C. GORIS, members of the Herpetological Society of Japan, for submitting material. Also, I wish to thank Mr. Kiyoyuki MIZUSAWA of the 406 Medical Laboratory, USAMCJ for the gift of specimens from the collections made by members of the Miyakejima General Biological Expedition of the Tokyo University of Agriculture. Thanks also to Dr. I. SUZUKI of The Jikei Medical University, and to Dr. H. TAKAHASHI of the Medical School of JSDF for supplying me with specimens.

Description

Rostral heptogonal, nearly as high as wide, bent over on the snout, the portion visible from above somewhat less than the area of the frontonasal; supranasals broadly in contact behind the rostral, some what smaller than prefrontals, forming a median suture; frontonasal broader than long, touching the anterior loreals, forming a broad suture with the frontal; prefrontals smaller than frontonasal in contact behind the frontonasal, widely separated medially; frontal elongated, longer than its distance to the end of the snout, touching three supraoculars; frontoparietals much longer than the prefrontals, forming a median suture less than half their length; parietals large; inter-

* Japan Snake Center

Table 1. List of *Eumeces*

Number	Sex	Total length	Snout to vent	Vent to tip of tail	Snout to ear-opening	Snout to anterior border of eye	Diameter of eye	Ear-opening to posterior border of eye	Snout to axilla	Axilla to groin	Greatest width of body	Greatest width of head	Length of head	Forelimb, from axilla	Hindlimb, from groin	Base of fifth to end of fouth toe	Longest toe	Scale rows	Supraoculars	Supracoulars touch frontal
No. 1511	♀	91 mm+	66	35+	14	5	4	6	26	38	14	11	13	18	28	3	10	28	4	3
1512	♀	114+	59	55+	11	4	3.8	4	23	34	10	8.2	9.2	19	25	2.2	9	28	4	3
1513	♀	122+	71	51+	14	5	4	5.2	26	41	12	10	12	19	27	3	9	28	4	3
1514	♂	151+	63	88+	12.5	5	4	5	25	36	10.5	9.2	11.2	17	26	3	9	28	4	3
1515	♀	148	55	93	11	4.5	4	4	23	30	9	8.2	10	16	22	2	8	28	4	3
1516	♂	134	54	80	11	4	4	4	23	30	9	8	9	14	21	2	8	28	4	2,3
1517	♀	101+	51	50+	10	3.5	3.8	3.5	21	28	8.5	7.5	9	14.5	22	2	7.5	28	4	3
1518	♀	109+	58	51+	12	5	4	4	23	32	11	9	10.5	17	25	2	9	28	4	3
1519	♂	89+	55	34+	11	4	4	4	22	30	12	8	10.2	16	25	2	9	28	4	3
1520	—	62+	56	6+	11	4.2	4	4	24	32	10.5	9	11	17	23	2	8	30	4	3
1521	♂	91+	66	35+	14	5	4	6	26	38	14	11	13	18	28	3	10	28	4	3
1522	♀	189	73	116	15	5.5	4.2	6	28	45	15	11	13	20	29	3	10.5	28	4	3
1523	♂	133+	58	75+	12	5	4	4	23	34	12	9	10	17	26	2.5	9	28	4	3
1524	♀	165	63	102	13	5	5	5	26	36	12	10	12	20	28	3	10	28	4	2,3
1525	♂	185	68	117	14	6	4	5	28	38	12	11	13	19	28	3	10	26	4	3
1526	♀	183+	78	105+	15	6	5	5.2	29	47	13	12	14	21	30	3.5	12	28	4	3
1527	♀	80+	70	10+	14	4	5	5	28	39	12	11	13	20	28	3	10.5	28	4	3
1557	♂	151	50	101	10	5	3	4	20	27	11	8	9	16	24	2.5	8	30	4	3
1558	♂	172+	66	106+	15	6	3	7	29	36	16	12	14	19	30	3	9	30	4	3
1559	♀	123+	72	51+	16	7	3.5	7	29	42	17	14	15	20	32	3	10	30	4	3
1560	♀	202	80	122	17	8	4	7	32	44	15	13	15	22	32	3	11	28	4	3
1561	♂	144	61	83	13	5	3.5	5	25	35	11	10	11	16	27	2.5	10	28	4	3
1562	♀	106+	80	26+	15	6	4	6	31	47	15	12	13	12	31	3	12	28	4	3
1563	♀	140+	65	75+	14	5.5	4.5	5.5	27	36	13	10	12	20	32	3	11	28	4	3
1564	♀	161+	78	83+	15	5	4	5.5	30	46	14	12	13	20	29	2	11	26	4,5	3
1565	♂	106+	80	26+	17	7	4	7.5	32	47	15	14	15	23	36	2	12	28	4	3
1566	♀	91+	71	20+	16	6	5	6	30	43	12	12	15	21	28	2	8	28	4	3
1567	♂	149+	79	70+	17	6	4	7	31	47	14	13	16	22	31	3	11	28	4	3
1568	♂	127+	83	44+	18	7	4	8	32	50	16	15	16	21	32	3	10	28	4	3
1569	♂	144	59	85	11	4.5	3	4	20	28	10	8	8.5	12	21	2	7.5	28	4	3
1570	♀	131+	71	60+	16	6.5	5	6.5	31	38	13	12	14	20	28	3	9	30	4	3

okadae from Izu Islands

Postnasals	Superciliaries	Preocular	Presuboculars	Postoculars	Postsuboculars	Lower palpebral series	Nuchals	Supralabials	Infralabials	Postlabials	Postmentals	Frontnasal touches frontal	Interparietal inclosed	Date	Collector	Locality
1	8	1	2	2	6	13,14	2	8	6	4	1	Yes	No	Aug. '62	R. C. Goris	Sueyoshi Hachijojima
1	8	1	2	2	5	14	2	7	6	3	1	Yes	No	Ditto	Ditto	Ditto
1	8,10	1	3,2	2	4	13	2	7	6	1	1	Yes	No	Ditto	Ditto	Ditto
1	7,8	1	3	2	5	11,12	2	7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	8	1	3,2	2	5	11	2	7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	7,8	1	2	2	5	11,12	2	7	6	2,1	1	Yes	No	Ditto	Ditto	Ditto
1	8,9	1	3	2	4,5	11,12	2	7	6,5	1,2	1	Yes	No	Ditto	Ditto	Ditto
1	8,9	1	2,3	2,3	5	12,11	2	7	7,6	1	1	Yes	No	Ditto	Ditto	Ditto
–,1	9	1	2,3	2	4,5	12	2	7	5,6	2	1	Yes	No	Ditto	Ditto	Ditto
1	8	1	3	2	5	12	2	7	5,6	2	1	Yes	Yes	Ditto	Ditto	Ditto
1	9,8	1	2	1,2	4,5	11,12	1	7	6	2	1	Yes	No	July '63	Ditto	Ditto
1	9	1	2	2	4,5	12	1	6,7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	8	1	2	2	4	11,10	1	7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	7,8	1	2	1	4	10,11	1	7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	8,9	1	2	2,1	4	10	1	6	6,5	2	1	Yes	No	Ditto	Ditto	Ditto
–,1	7	1	2	2	5,4	10	1	7	5,6	2	1	Yes	No	Ditto	Ditto	Ditto
1	8,7	1	2	2	5,4	13,12	1	7	5	1,2	1	Yes	No	Ditto	Ditto	Ditto
1	9,8	1	2,3	2	5,4	10,11	2	7	6,7	2,1	1	Yes	No	July '64	K. Mizusawa	Tsubota Miyakejima
1	8	1	2	2	4	10,11	2	7	6	2	1	Yes	Yes	Ditto	Ditto	Ditto
1,2	8	1	3	2	5	10,11	2	7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	7	1	4,2	2	5,4	11,10	2	7	4	2	1	Yes	No	Aug. '63	R. C. Goris	Sueyoshi Hachijojima
1	8	1	2	2	5,4	11	2	7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	7,8	1	3,2	2	5	11,12	2	7	6	1	1	Yes	No	Ditto	Ditto	Ditto
–	8	1	2	2	5,4	10,11	2	7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	7,8	1	2	2	5	11	2	7	6	1,2	1	Yes	No	Ditto	Ditto	Ditto
1	6,7	1	2	2	5	10,11	2	7	6	2	1	Yes	No	Ditto	Ditto	Ditto
1	7	1	2	2	4	12,11	2	7	6	2,1	1	Yes	No	Ditto	Ditto	Ditto
1	7	1	2	2	5	12,11	2	7	6	1	1	Yes	No	Ditto	Ditto	Ditto
–,1	9,8	1	3	2	5,4	11,12	2	7	6	3,2	1	Yes	No	Ditto	Ditto	Ditto
1	8,9	2	2	2	4,5	12	2	7,8	6	1	1	Yes	No	July '62	I. Suzuki	Shikinejima
1	8	1	2	2	3,5	11,12	1	7	6	1	1	Yes	No	July '62	H. Takahashi	Niijima

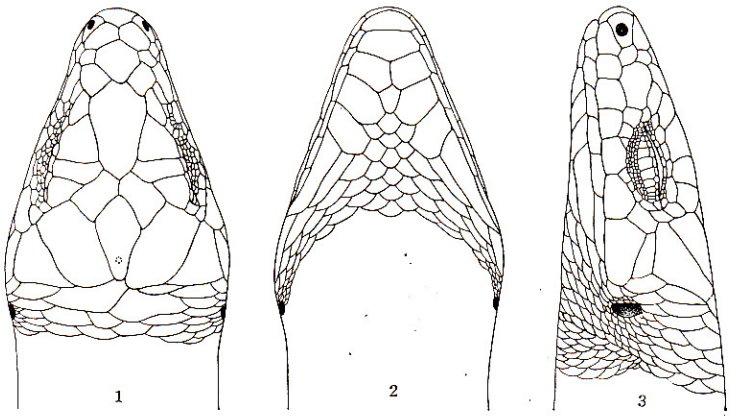

Fig. 1. *Eumeces okadae* STEJNEGER from Izu Islands.
1. Dorsal view of head.
2. Ventral view of head.
3. Lateral view of head.

parietal slender, not enclosed by the parietals; only one pair of muchals; nostril in then center of a single nasal, which is higher anteriorly than posteriorly; a small postnasal nearly as large as anterior loreal and in contact with supranasal, nasal, first and second labials and anterior loreal; anterior loreal, small, separated widely from the labials, posterior loreal rectangular, distinctly wider than high and in contact with second and third supralabials; four supraoculars, three touching frontal; seven-nine superciliaries, anterior three or more times as large as the second or last; two-three presuboculars; four-five postsuboculars; two small postoculars, and one preocular with a small scute above followed by a series of granules; five-six enlarged scales on the lower eyelid, these separated from the subocular by three rows of granules; primary temporal rather large and rectangular; upper temporal in the second row very large much larger than lower one, its posterior border sinuous; lower temporal of the second row elongated, squarish, with upper and lower edges nearly parallel; posterior edge slightly rounded; tertiary temporal elongated, separated from the upper secondary temporal; fifth under the eye; one-two postlabials; mental rather large and wide, its labial border greater than that of the nostral; one unpaired postmental, followed by three pairs of chinshields; six infralabial, the sixth longest, being band-like, long and narrow; ear opening large; scales of the median series of the back slightly wider than adjoining scales and distinctly wider than the lateral series; 28–30 scale rows about middle of body; median preanals very large; lateral postanal scale bearing a well developed keel. Well-developed area of axillary scales, with a few at the upper anterior insertion of the limb; two or three granular series behind insertion of hind limb; about 16 scales around insertion of forelimb; outer scale on the wrist rounded, padlike; palm with a triangular area of six-ten enlarged, rounded, padilike scales, with other smaller ones; basal lamellae on toes padlike; lamellar formula for fingers. About 20 scales round insertion of leg; heel with several enlarged scutes, only part of which are padlike; many small padlike scales on the wrist rounded, on outer mid-portion of sole; rest of sole covered with small granules; lamellar

formular for toes.

Subcaudals widened.

Color alive

Dorsal nearly a uniform dark olive, the head a little lighter and brownish; an obscure dark brown lateral band proceeds from the temporal region to the groin; lying dorsaly and running along this band is a pale blue band about one scale wide; ventral grayish, underside of limbs lighter gray, underside of tail also light for a part of its length; chin and throat reddish; tail is not bright blue in young form.

Variation

The postnasal appears to be normally present, and the lower part of the anterior

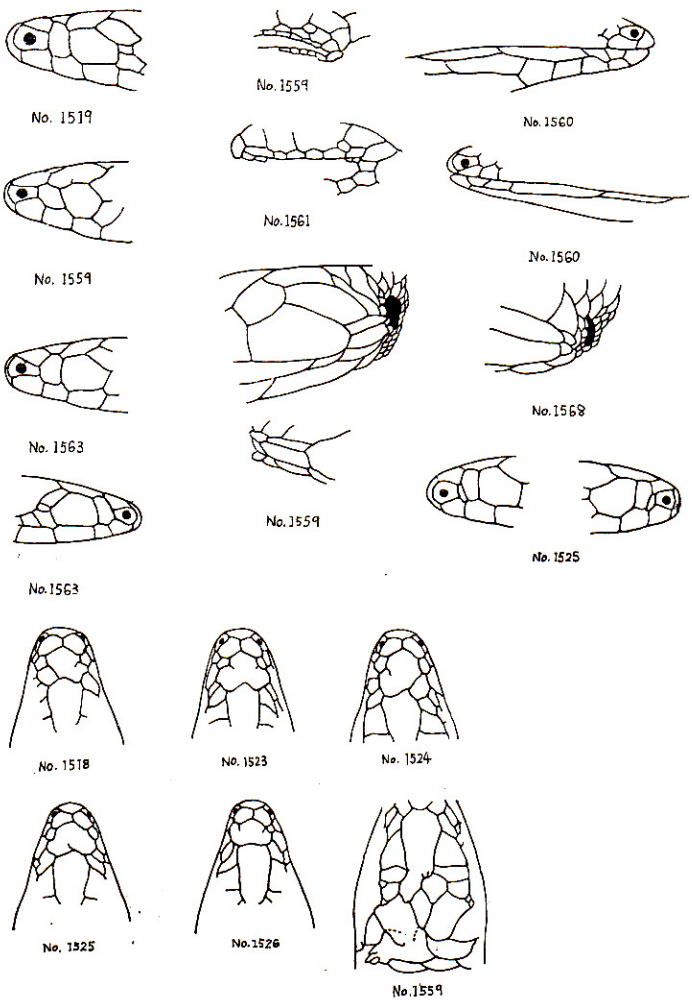

Fig. 2. *Eumeces okadae* STEJNEGER showing the variations of the scalation of the head.

loreal is fused with the postnasal. In the specimens from Hachijo Is., anterior loreal is fused with the postnasal in three specimens on the left side and in one specimen on both sides. The normal number of upper labials is seven, however, one specimen has eight on both sides, one has eight on the right side only, one has six on the left side only, and another one has six on both sides. The number of scale rows is 28 in twenty-four specimens, 30 in five, and 26 in two. Normally three supraoculars touch the frontal, but on one specimen only, two supraoculars touch the frontal only on the left side. The frontonasal is in contact with the frontal in all specimens examined; the frontal is fused with one or both prefrontal in ten specimens.

In younger specimens, the dorsal color is brownish olive, with a distinct dorso-lateral pale-blue band about one scale wide; the underside of the tail becomes dirty white and the upper part gray or olive, not bright blue.

Summary

The present species is allied to *E. latiscutatus*, but differs from it by the following characteristics: two-four more scale rows round the middle of the body; anterior loreal widely separated from the labials by postnasal; posterior loreal rectangular, distinctly wider than high; five lined dorsal pattern, three inside lines not distinct, the median line not bifurcating on head, the pattern more or less retained in adults; tail color of young form is not bright blue.

抄　　録

オカダトカゲ *Eumeces okadae* は，1960 年に，伊豆七島の三宅島，新島産の標本にもとづいて，STEJNEGER により，トカゲ *Eumeces latiscutatus* の 1 亜種として記載されて以来，TAYLOR 1935，岡田 1939，中村・上野 1963 らにより種について検討が加えられて来たが，それらの個体数は多くはなかった。

著者は 1962 年以来現在まで，本種の生体および液漬標本計 31 個体の外部形質について，比較検討する機会を得た。その結果下記に列挙する形質において，近縁のトカゲ *E. latiscutatus* と相違を示すことから，本種は独特種として認めるのが妥当ではないかとの結論に達した。

1. 本種の胴部中央部附近における体鱗数は 28～30 で，トカゲのそれよりも 2～4 列多い。
2. anterior loreal は postnasal とほぼ同大で，原則として後者が介在することによって，supralabials と相接しない。
3. posterior loreal はほぼ短形で，幅は高さよりも微しく大きい。
4. 体背面を縦走する 5 条の斑紋のうち，内側の 3 条は幼体時でも不明瞭であり，正中線上の縦条は頭部基部に達しても二叉しない。また尾部後半分は幼体といえども，鮮明な青白色でなく，灰色または暗オリーブ色。

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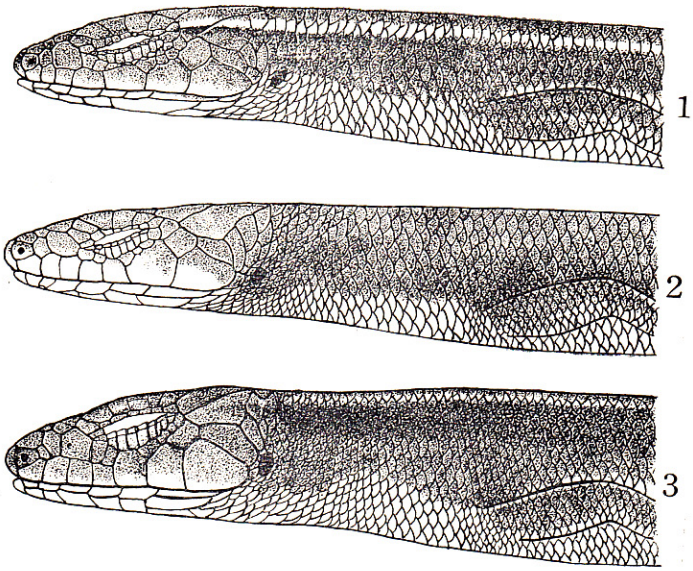

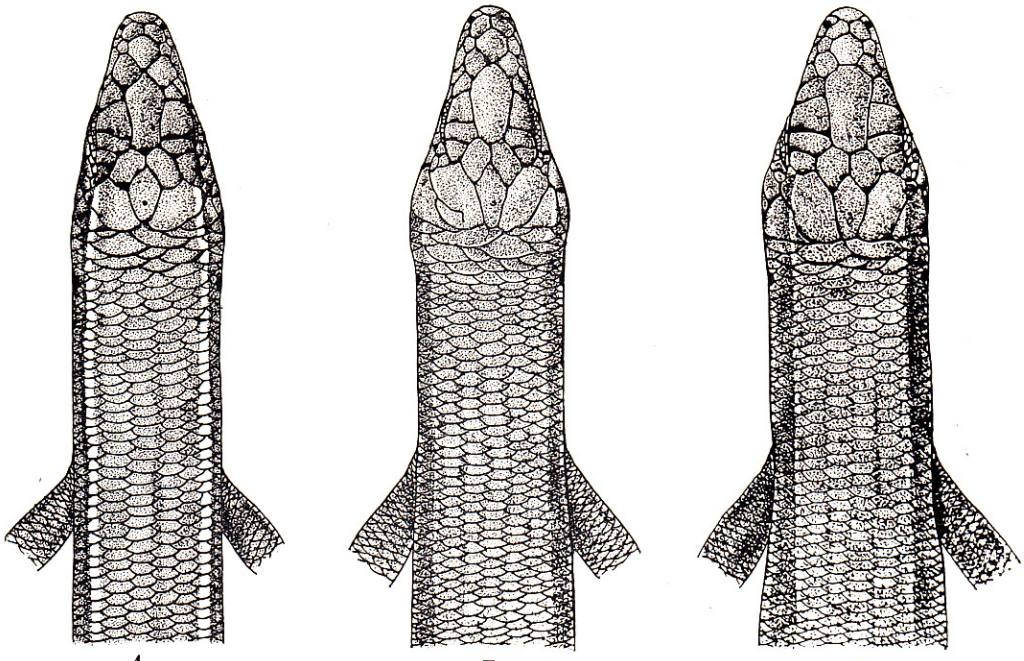

Plate I. Variation of the back patterns of *Eumecies okadae* STEJNEGER.

1. The lateral side patterns mostly found in the young specimens.
2-3. The lateral side patterns of the adult specimens.
4. The dorsal side patterns mostly found in the young specimens.
5-6. The dorsal side patterns of the adult specimens.