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Hobart M. Smith

*University of Colorado, Boulder*

Rosella B. Smith

*University of Colorado, Boulder*

Jean Guibé

*Muséum National d'Histoire Naturelle, Paris, France*

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THE IDENTITY OF BOCOURT'S LIZARD *EUMECES*  
*CAPITO* 1879

Hobart M. Smith<sup>1</sup>, Rozella B. Smith<sup>1</sup>, and Jean Guibé<sup>2</sup>

**ABSTRACT.**— *Eumeces capito* Bocourt, 1879, is a senior synonym of *Eumeces xanthi* Günther, 1889. No exception to application of the Law of Priority is recommended in this case. The type locality of *E. capito* as originally published ("La côte orientale des Etats-Unis") is erroneous. Undoubtedly the correct locality is China, but it is not restricted at present.

In preparation of "Synopsis of the Herpetology of Mexico," a problem has arisen: whether or not to apply the name *Eumeces capito* Bocourt (1879:429-431, pl. 22D, Figs. 8, 8a-8c) to some Mexican species. The origin of the only specimen (holotype, no. 5531 of the Muséum National d'Histoire Naturelle, Paris) is in doubt, for although the published locality is "la côte orientale des Etats-Unis," the several registers in the Muséum in Paris give still other indications: "Mexique" and "Amérique septentrionale." The collector is also unknown, for M. S. Braconier, by whom Bocourt (*loc. cit.*) indicated the specimen was "donné," was merely an assistant in the Muséum, never participating in any expedition; he simply made this and other specimens available for study by Bocourt and other scientific personnel.

Taylor's exhaustive monograph (1936: 28, 231-2, 506) of *Eumeces* sheds no light upon the problem of the identity of *E. capito*, as the type was not examined, and by description alone the name could not be allocated. Taylor did note the possibility that the name applies to his *Eumeces inexpectatus*, 1932, although he thought it "probable that it is based upon an aberrant specimen of *fasciatus*" (p. 232).

We have thus been motivated to re-examine the only specimen constituting the hypodigm for *Eumeces capito*, being made available by the junior author for study by all of us. It proves to be a typical, mature example of *Eumeces xanthi* Günther (1889:218). The specimen is in excellent condition, slightly softened, but not notably damaged, discolored, or faded. Salient data are: snout-vent 72 mm, hind leg 28 mm, foreleg 19 mm, axilla-groin 40 mm, tail 69 mm (30 mm regenerated); 24 scale rows around midbody; 54

scales from parietals to above anus; 16-16 lamellae under 4th toe; a conspicuous patch of enlarged postfemoral scales; one postnasal; two postmentals; parietals narrowly separated posteriorly by tip of interparietal; frontonasal broadly contacting frontal; upper secondary temporal quadrangular, dorsal and lateral edges nearly parallel, separated from 7th (posterior) supralabial by contact of primary temporal and lower, subtriangular secondary temporal; two pairs of nuchals; median preanals overlapped by lateral scales; a somewhat modified, slightly keeled lateral postanal; median subcaudals twice as wide as adjacent scales; a distinct, brown lateral stripe on 4th scale row and edges of adjacent 3rd and 5th rows; a dorsolateral light stripe occupying most of the 3rd scale row; and a lateral light stripe occupying the lower half of the 5th scale row; no evidence of a median light stripe on head, and its only evidence on trunk the absence of dark pigment on the adjacent halves of the 2 median scale rows; other dorsal scale rows with some dark flecking on the base of each scale. Other features as indicated in the accompanying figures.

Most of the characters of this specimen conform with those detailed by Taylor (1936:239-243, Fig. 33, Pl. 15) for *Eumeces xanthi*, and indeed the holotype of *E. capito* closely resembles one of the syntypes figured on his Plate 15 (Fig. 3), although the pigment loss has not attained the level there depicted for a 76 mm specimen. Critical are the modified lateral postanals, the enlarged postfemorals, the low number (24) of scale rows, and the position of the dorsolateral light stripe on the 3rd scale row, in addition to the single postnasal and paired postmentals. No American species of *Eumeces* have enlarged postfemorals; only a few Asiatic species possess them, and all except *E.*

<sup>1</sup>Department of Environmental, Population, and Organic Biology, University of Colorado, Boulder, 80302, U.S.A.

<sup>2</sup>Muséum National d'Histoire Naturelle, 25 Rue Cuvier, Paris, 75005, France.

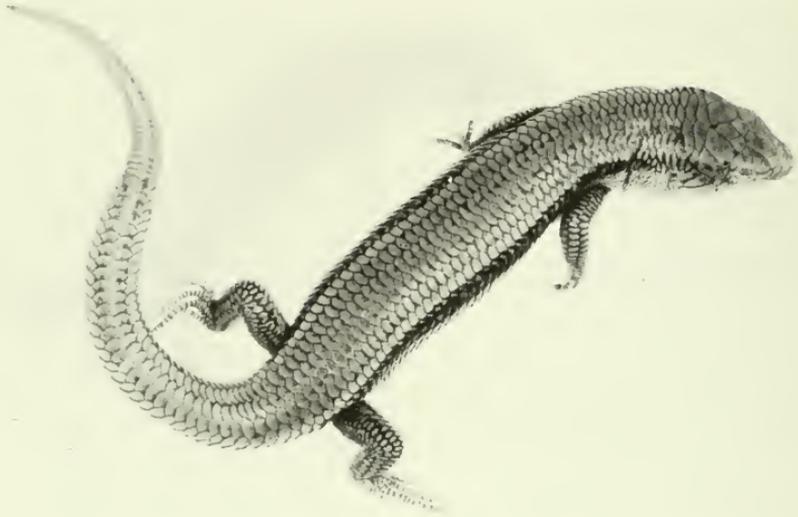


Fig. 1. Holotype of *Eumeces capito* Bocourt, dorsal view.

*xanthi* are eliminated from consideration by number of scale rows or by the post-nasal-postmental characters.

The only notable discrepancy between the holotype of *E. capito* and Taylor's account of *E. xanthi* is the low number of dorsals (54) in the former, as compared with the range (56 to 60) for the latter. However, northern examples of *E. xanthi* tend to have fewer dorsals (56-59, compared with 59-60 for southern examples); nevertheless, northern examples tend to have 22 scale rows, whereas southern ones usually have 24. We suspect that the type of *E. capito* was taken in more northern parts of the species' range, conforming more closely with the geographic variant that bears the name *Eumeces pekinensis* Stejneger (1924:120), type locality Hsin-Lung-Shan district, imperial hunting grounds, Chihli Province, 665 mi N Peking, China, than with the geographic group represented by *Eumeces xanthi* (type locality Ichang, Hupeh, China). The contact of frontonasal with frontal that occurs in the type of *E. capito* conforms with Stejneger's description and figures (1925:49-51, fig. 2) for the three types of *E. pekinensis* and with Taylor's figure (1936:242, fig. 33), in which the two prefrontals are in contact and therefore separate frontal and frontonasal. However, the figured specimen is from the same district as the types of *E. pe-*

*kinensis*; presumably the character is not taxonomically significant. On the contrary, the number of dorsals and number of scale rows may indeed be significant,



Fig. 2. Dorsal view of head of the holotype of *Eumeces capito* Bocourt.



Fig. 3. Lateral view of the head of the holotype of *Eumeces capito* Bocourt. The minute spheres abundantly evident in this figure, and less abundant in Figs. 2 and 4, are air bubbles. All photos were taken of the specimen under water.

at least subspecifically; more material will be required to establish the nature of the variation that occurs in the species. Certainly the low number of dorsals in the type of *E. capito* casts no doubt upon proper allocation with *E. xanthi*, although it may be important in naming the geographic races of that species at some time in the future.

We are not aware of more recent studies of *E. xanthi* that would shed any light upon the geographic variation of that species. The related species *E. tamdaoensis* Bourret (1937:19-21, fig. 5) is very similar and may well be referable to *E. xanthi* as a geographic race, but the original description does not note presence or absence of enlarged postfemorals; a peculiar head pattern of juveniles may be distinctive, as well as the greenish color above and below in life. *Eumeces coreensis* Doi and Kamita (1937:211-215, figs.) is not closely similar, being related more closely to *E. chinensis* (no postnasal, no enlarged postfemorals). However, the wide range of *E. xanthi* (and its close relatives *E. tamdaoensis*, *E. elegans* and *E. tunganus*) suggests that a polytypic species or a species complex may be involved, the nomenclature of which is far from stable.

Because of this primitive state of knowledge of variation in the *xanthi* subgroup (unique in having enlarged postfemorals) of the Asiatic members of Taylor's *fasciatus* group, we regard it unwise to restrict the type locality of *E. capito*; clearly the published designation of eastern United States is in error, and China probably embraces the lizard's actual origin, but the

final fixation remains in the hands of future workers.

In like fashion we are reluctant to suggest that the name *Eumeces capito* be suppressed in order to preserve the name *Eumeces xanthi* despite the facts that (1) *E. xanthi* has been used for 85 years whereas (2) *E. capito* has never been used, except for its types, since it was proposed 95 years ago. Even *E. xanthi* was not clearly fixed with a recognizable species until 1936, however, when Taylor demonstrated that it is the same as the more familiar (even though more recently described) *Eumeces pekinensis* Stejneger (1924). Present decisions are not limited any longer by a rigid (and ambiguous) *nomen oblitum* rule. That rule is replaced by this statement: "A zoologist who considers that the application of the law of Priority would in his judgment disturb stability or universality or cause confusion is to maintain existing usage and must refer the case to the Commission for a decision under the Plenary Powers." It is to be noted that the requirement to justify suspension of the Law of Priority—use of *xanthi* by at least five different authors in at least 10 publications after Taylor's 1936 fixation—would be difficult to meet (see ICZN, 1972: 185-186). Convinced that stability of nomenclature is not a factor to be considered in the present context, we recommend that *E. xanthi* be replaced as a species name by its senior synonym *E. capito*, recognizing that it is quite likely that the name *E. xanthi* may well be utilized in the future for a subspecies of *E. capito*. Since *E. capito* is the earliest name applied to any member of the subgroup characterized by enlarged postfemorals, we



Fig. 4. Posterior view of hind leg of the holotype of *Eumeces capito* Bocourt, showing the patch of enlarged scales on thigh.

suggest that it be designated the *capito* subgroup.

Our conclusion not to recommend suppression is reinforced to a certain extent by realization that the failure of recognition of the identity of *E. capito* for almost a hundred years is not to be attributed wholly to Bocourt, for his description is exemplary in detail and illustration (even though the critical postfemoral scale character was not noted) and appeared in a widely known work. The erroneous locality was, of course, the misleading factor, but certainly not a unique one; many species have been properly allocated despite totally misleading type localities. A succession of extraordinary circumstances that prevented subsequent workers from reexamining the holotype is responsible for the name's long history as a *nomen dubium*. Had the name been proposed with a totally inadequate description or in a very obscure outlet only recently discovered, it might be construed as appropriate that it remain in oblivion; but under the circumstances as they actually exist, it is fully appropriate that Bocourt's name be given its impartial place in nomenclature, subject only to the automatic provisions of the Code. The present deficiency of an effective type locality can

readily be remedied at the appropriate time, when an arbitrary designation can be proposed in conformance with detailed knowledge of geographic variation that is now lacking.

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