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## TAXONOMIC NOTE

## *Ctenichthys interrupta* Howell Rivero, 1936, a junior synonym of *Gobioclinus bucciferus* (Poey, 1868) (Teleostei: Labrisomidae)

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The unique holotype of the nominal species *Ctenichthys interrupta* Howell Rivero, 1936 is in the Museum of Comparative Zoology as MCZ 34151. Luis Howell Rivero described the single 52-mm SL specimen, from Matanzas, Cuba, as both a new genus and new species in his review of fishes of Cuba (Fricke et al. 2023). The species continues to be sporadically listed as one of the species of fishes of the Greater Caribbean. Howell Rivero singled out multiple interruptions in the lateral line and the lateral line not reaching the caudal-fin base as a generic-level character for the new genus and also noted the absence of vomerine teeth.

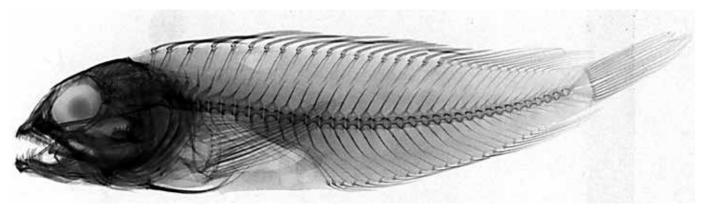
Hubbs & Springer (1954) and Springer (1959) concluded that the specimen did indeed have vomerine teeth and found no reason to support a new genus (they did not mention the interrupted lateral line) and synonymized the genus *Ctenichthys* with *Labrisomus* Swainson, 1839; however, they concluded they were unable to assign it to a species. They suggested it was probably a synonym of *Labrisomus bucciferus* Poey, 1868.

**Key words:** forensic taxonomy, ichthyology, coral reef fishes, blennies, Museum of Comparative Zoology, Harvard University, Caribbean, Atlantic

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**Figure 1.** *Gobioclinus bucciferus,* x-ray of MCZ 34151, holotype of *Ctenichthys interrupta* Howell Rivero, 1936 (M.H. Sorce, Museum of Comparative Zoology, Harvard University; ©President and Fellows of Harvard College).

Springer (1959) was noncommittal whether any sub-genera within *Labrisomus* deserve genus-level recognition. More recently, the subgenera *Gobioclinus* Gill, 1860 and *Brockius* Hubbs, 1953 have been elevated to genus level based on a phylogenetic review by Lin & Hastings (2013) (Fricke et al. 2023).

The x-ray of the holotype of *C. interrupta* (Fig. 1) shows a median fin-ray count of D XIX,12; A II,20 and a physical count confirms a pectoral-fin-ray count of 13 on both sides (note Howell Rivero reported A II,19). These counts are consistent with the range reported for *Gobioclinus bucciferus* in Springer (1959), and it is the only species fitting that dorsal-fin count to have a mode of 20 anal-fin rays; nevertheless, the counts do overlap the broad range of counts reported for *Gobioclinus gobio* (Valenciennes in Cuvier & Valenciennes,1836), *Gobioclinus guppyi* (Norman, 1922), and *Gobioclinus kalisherae* (Jordan, 1904) by Springer (1959).



**Figure 2.** *Gobioclinus bucciferus,* fresh specimen (left), Norman's Pond Cay, Bahamas, JVT-05-437 (J.Van Tassell); (right) MCZ 34151, holotype of *Ctenichthys interrupta* Howell Rivero, 1936 (M.H. Sorce, Museum of Comparative Zoology, Harvard University; ©President and Fellows of Harvard College).

In addition to the morphological and meristic features, the specimen still retains the outlines of the diagnostic live color pattern of *G. bucciferus* (Fig. 2), specifically a scattering of pale rounded spots on the cheek and dark lines running obliquely back from the lower rear quadrant of the orbit. With the matching characters and color pattern, the specimen can be identified as *G. bucciferus*. The species is presently known from throughout the Greater Caribbean, including Cuba, ranging from Florida to Venezuela (Robertson & Van Tassell 2023).

Our examination of the holotype revealed that the interrupted lateral line emphasized by Howell Rivero is apparently the result of scales lost in handling; indeed, patches of scales are missing and tubed scales are displaced (Fig. 3). Multiple interruptions in lateral lines are not a taxonomic feature within the family and would undoubtedly be considered an anomaly if not an artifact of handling.



**Figure 3.** *Gobioclinus bucciferus,* detail of left side of MCZ 34151, holotype of *Ctenichthys interrupta* Howell Rivero, 1936 (M.H. Sorce, Museum of Comparative Zoology, Harvard University; ©President and Fellows of Harvard College).

## References

- Fricke, R., Eschmeyer, W.N. & Van der Laan, R. (Eds.) (2023) Eschmeyer's Catalog of Fishes: Genera, Species, References, electronic version ( 8 August 2023), San Francisco, CA, USA. Available at http://researcharchive. calacademy.org/research/ichthyology/catalog/fishcatmain.asp (last accessed 8August 2023).
- Howell Rivero, L. (1936) Some new, rare, and little known fishes from Cuba. *Proceedings of the Boston Society of Natural History*, 4, 41–76.
- Hubbs, C.L. & Springer, V.G. (1954) The taxonomic position of *Gobioclinus gobio* and *Ctenichthys interrupta*, two names for blennioid fishes. *Bulletin Marine Science Gulf and Caribbean*, 4, 346–350.
- Lin, H.-C. & Hastings, P.A. (2013) Phylogeny and biogeography of a shallow water fish clade (Teleostei: Blenniiformes). *BMC Evolutionary Biology*, 13, 1–18. https://doi.org/10.1186/1471-2148-13-210

Robertson, D.R. & Van Tassell, J. (2023) *Shorefishes of the Greater Caribbean: online information system. Version* 3.0, Smithsonian Tropical Research Institute, Balboa, Panamá. https://biogeodb.stri.si.edu/caribbean/en/pages

Springer, V.G. (1959) Systematics and zoogeography of the clinid fishes of the subtribe Labrisomini Hubbs. *Publications of the Institute of Marine Sciences, University of Texas*, 5, 417–492.