

Rediscovery of *Sewellia lineolata* in Annam, Viet Nam (Teleostei: Balitoridae)

M. Kottelat

Kottelat, M. Rediscovery of *Sewellia lineolata* in Annam, Viet Nam (Teleostei: Balitoridae)
Zool. Med. Leiden 68 (11), 15.vii.1994: 109-112, figs 1-3.— ISSN 0024-0672.
Maurice Kottelat, Case postale 57, 2952 Cornol, Switzerland.

Key words: Balitoridae; *Sewellia*; Viet Nam.

Sewellia lineolata is recorded for the first time since its original description (in 1846) based on specimens without precise locality data. It occurs on the eastern slope of the Annam mountain range of Viet Nam, near Hue. The preoral groove communicating with the mouth described by earlier authors is an artefact.

Introduction

Valenciennes (in Cuvier & Valenciennes, 1846) described *Balitora lineolata* on the basis of an unspecified number of specimens reportedly collected by Diard in Cochinchina (the southern part of the present-day Viet Nam). Günther (1868) placed the species in *Homaloptera*, but he had not examined specimens of it. The species has been redescribed by Hora (1932) on the basis of the type series. Hora placed them in the separate, still monotypic, genus *Sewellia*. Since the original collection by Diard, the species has not been collected again and there were no precise locality data [see Kottelat (1990: 214) for discussion of *Schistura spiloptera* (Valenciennes, 1846) and other fish species collected by Diard in "Cochinchine"].

Through the courtesy of Martien van Oijen, NNM, I could examine a few Vietnamese freshwater fishes recently collected in Annam. Among them were the first known specimens with accurate locality data of *Sewellia lineolata*. As they are quite similar to the types, I shall only briefly describe them, paying some attention to the redescription of the mouth by Hora, which is not very accurate as he had only specimens more than a century old.

Material and methods

Methods for obtaining counts and measurements follow Kottelat (1990). Institutional acronyms used are: BMNH = Natural History Museum, London; RMNH = Nationaal Natuurhistorisch Museum, Leiden.

Sewellia lineolata (Valenciennes, 1846) (figs 1-3)

Material.— 1 syntype, 31.0 mm SL, BMNH 1931.10.26:3, Cochinchine, Diard; 1 syntype, 36.3 mm SL, RMNH 2011, Cochinchine, Diard; 2 ex., 44.1-48.8 mm SL, RMNH 31832, Viet Nam, Nghia Binh Prov., Trac Khuc River, Nguyen Huu Duc, 3.vii.1986.

Description (based on RMNH 31832).— General body shape is shown in figure 1. The two specimens are slightly damaged: the head of the 44.1 mm specimen has

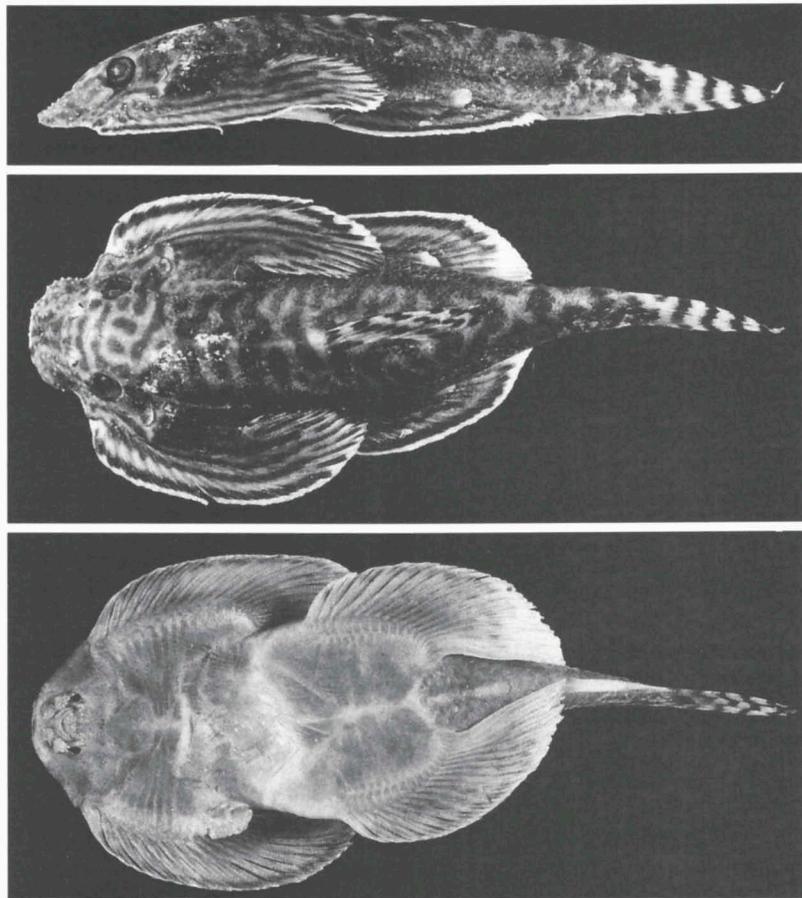


Fig. 1. *Sewellia lineolata*, RMNH 31832, Viet Nam, Nghia Binh Prov.; lateral and dorsal views of 44.1 mm SL specimen, ventral view of 48.8 mm SL specimen.

apparently been dried and the under surface of the head possibly dissected; the right pectoral fin of the 48.8 mm specimen has been damaged. Morphometric data for the 48.8 mm SL and 44.1 mm SL specimens respectively : total length 122.5, 124.0% SL; dorsal head length 29.5, 31.1% SL; lateral head length 24.6, 25.6% SL; predorsal length 52.0, 51.0% SL; prepelvic length 47.7, 50.6% SL; pre-anus length 75.4, 75.7% SL; preanal length 85.7, 86.2% SL; head depth at eye 11.3, 11.1% SL; head depth at nape 13.9, 14.5% SL; body depth at dorsal fin origin 17.8, 15.9% SL; depth of caudal peduncle 12.1, 9.8% SL; length of caudal peduncle 12.5, 9.3% SL; snout length 12.9, 15.2% SL; maximum head width 31.8, 31.1% SL; body width at dorsal fin origin 29.1, 28.1% SL; body width at anal fin origin 6.8, 7.0% SL; eye diameter 7.2, 5.0% SL; inter-orbital width 9.8, 11.8% SL; mouth width 5.5, 6.1% SL; height of dorsal fin 19.5, 18.1% SL; length of caudal fin 23.6, 25.4% SL; depth of anal fin 15.6, 17.2% SL; length of pelvic fin 39.5, 39.2% SL; length of pectoral fin 44.9, 46.0% SL.

Dorsal fin with 4 simple and 8 or $8\frac{1}{2}$ branched rays, its origin over or slightly in front of pelvic fin origin. Caudal fin obliquely truncate, the lower half longer, with

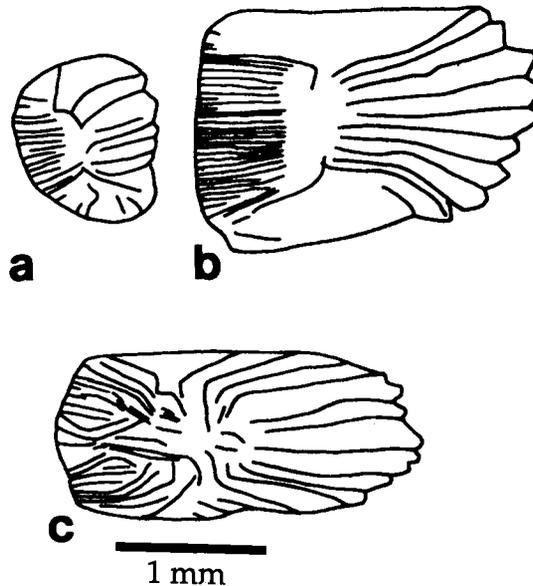


Fig. 2. Scales of *Sewellia lineolata*, RMNH 31832, 48.8 mm SL. a, from above pectoral fin; b, from above posterior extremity of pelvic fin; c, from caudal peduncle. All scales from row immediately under lateral line.

7+7 branched rays, none of them fused. Pectoral fin with one simple and 21 or 22 branched rays, overlapping anterior fourth or third of pelvic fin. Pelvic fin with one simple and 17 or 18 branched rays, reaching anal fin origin. Anal fin origin about 1.5-2 eye diameters behind anus, with one flat spine and $4\frac{1}{2}$ branched rays.

Tubercles on snout and cheeks; a row of tubercles on the proximal half of the 4-5 anterior pectoral rays; a few tubercles on each side of the anal spine at its extremity. 45-46 pores along lateral line. Scales absent on belly in front of posterior margin of pelvic girdle and on dorsal mid-line. Scales small anteriorly, larger posteriorly; $\frac{1}{2}5/1/5\frac{1}{2}$ horizontal rows of scales on caudal peduncle. The anterior scales have a regular posterior margin, while the posterior ones are conspicuously crenulated (fig. 2).

Gill opening small, smaller than the eye diameter, entirely above pectoral fin base. Mouth semicircular (fig. 3). Rostral cap continuous with upper lip. Preoral groove present between horny sheath of upper jaw and upper lip. Upper jaw overhanging lower jaw. Two pairs of maxillary barbels, plate- or flap-like, with broad basis, with 2-3 rows of soft tubercle-like projections; each of the four barbels partly covering a deep pit. The pits are not connected. The 'chin' has two flaps bearing soft tubercle-like projections connected by an underlying third and smaller flap, also with soft tubercle-like projections.

Remark.— Hora (1932: 315) described a deep semicircular groove communicating with the oral cavity and partly bridged by the maxillary barbels. This groove does not exist and probably results from poor preservation or from damages caused by uncaredful handling. The semicircular groove is probably the four deep pits, the walls of which have collapsed, explaining at the same time that the groove communicates with the oral cavity. According to Hora's foot-note, the specimens were already in a quite poor state when he examined them.

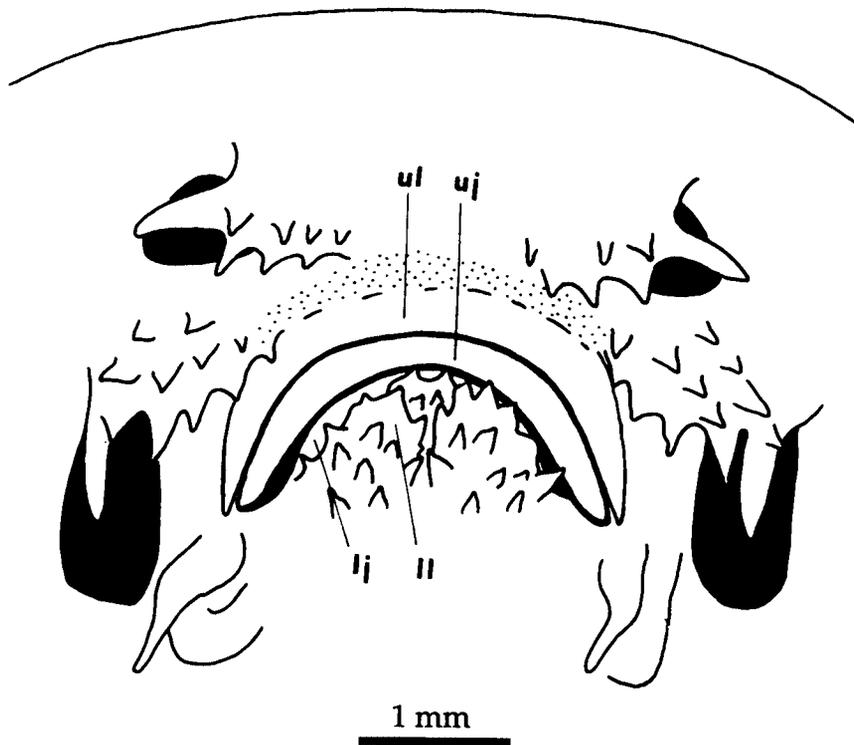


Fig. 3. Ventral surface of head of *Sewellia lineolata*, RMNH 31832, 48.8 mm SL. ul, upper lip; uj, horny sheath of upper jaw; lj, horny sheath of lower jaw; ll, lower lip.

Acknowledgements

I am pleased to thank Martien van Oijen for his help during my visit at the NNM and for the loan of the specimens. At the time this paper was written, I was supported by a grant from Fonds National Suisse de la Recherche Scientifique (requête 023A-026012).

References

- Cuvier, G. & Valenciennes, 1846. Histoire naturelle des poissons vol. 18: i-xix, 1-505, pls 520-553.— Paris
- Günther, A, 1868. Catalogue of the fishes in the British Museum vol. 7: i-xx, 1-512.— London
- Hora, S.L., 1932. Classification, bionomics and evolution of homalopterid fishes.— Mem. Indian Mus. 12: 263-330, pls 10-12.
- Kottelat, M., 1990. Indochinese nemacheilines. A revision of nemacheiline loaches (Pisces: Cypriniformes) of Thailand, Burma, Laos, Cambodia and southern Viet Nam: 1-262.— München.

Received: 18.v.1993

Accepted: 31.viii.1993 after revision

Edited: M.J.P. van Oijen & J.C. den Hartog