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A NEW RECORD OF *VAILLANTELLA EUEPIPTERA* (PISCES: OSTEICHTHYES: BALITORIDAE) FROM THE MALAY PENINSULA

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ABSTRACT.- *Vaillantella euepiptera* (Vaillant, 1902) is first recorded for the Malay Peninsula from Sg. Bera, Bera District, Pahang.

INTRODUCTION

Loaches of the genus *Vaillantella* Fowler, 1905 (family Balitoridae) was represented in the Malay Peninsula by one species, viz., *Vaillantella maassi* Weber & de Beaufort, 1916. *V. flavofasciata* Tweedie, 1956, described from Kuala Tahan, Pahang (Malaysia) has been treated as a synonym of*V. maassi* by many workers (eg. Roberts, 1989:109; Kottelat, 1989:13; Zakaria-Ismail, 1984:25, 1989:235). *V. maassi* is described from the Kampar Kiri drainage of Central Sumatra, and subsequently recorded from the Kapuas drainage of Western Kalimantan (Borneo) (Roberts, 1989:109); and the Sungai Anak Jasin of the Endau drainage (Zakaria-Ismail, 1987:407) of Peninsular Malaysia. Kottelat (1990:18) reports *V. maassi* from the Tapi River basin and the Mae Nam Sai Buri in Peninsular Thailand (see Fig. 4).

A 7 cm *Vaillantella* was collected from the middle Sungai Nerus of the Trengganu drainage in Malaysia by Cramphorn (1980:53; 1983:19). It was described as being dark brown with a narrow sandy stripe over the dorsum, white/cream on the ventrum and having small and dark eyes, clear fins except for the caudal fin, which has dark rays. Dr. M. Kottelat (pers. comm.) has examined this specimen and several others collected from the same locality, presently deposited at the British Museum (Natural History). He has identified them as *V. maassi*. Mizuno *et al.* (in Mizuno & Furtado, 1982:324) record "*Vailentalla flavofasciata*" from Tasik Bera, but without comment nor illustration.

Vaillantella euepiptera (Vaillant, 1902), previously known only from the Kapuas basin of Western Kalimantan in Borneo is now recorded for the Malay Peninsula on the basis of a single specimen presently deposited in the Zoological Reference Collection of the Department of Zoology, National University of Singapore (ZRC).

Kelvin K. P. Lim - Zoological Reference Collection, Department of Zoology, National University, Kent Ridge, Singapore 0511.

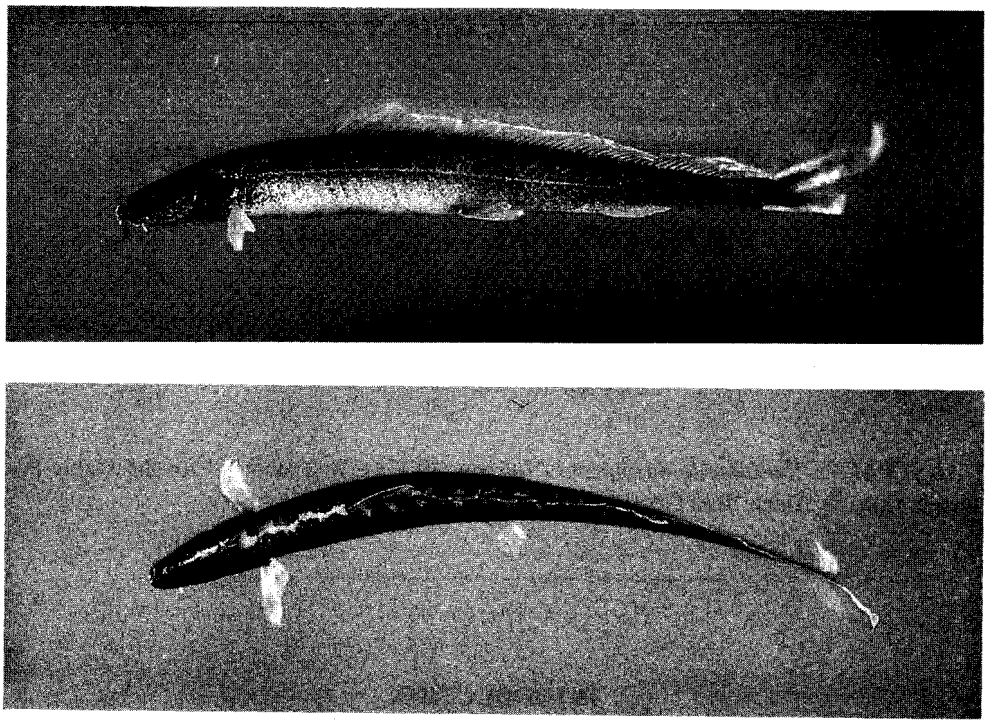

Figure 1. *Vaillantella euepiptera* (ZRC.27390), dorsal and lateral views.

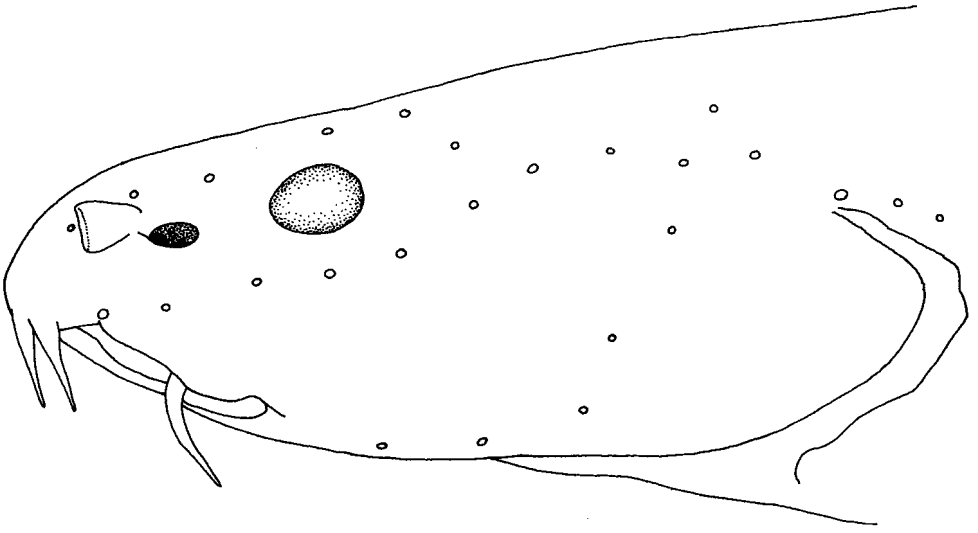

Figure 2. Head of *Vaillantella euepiptera* (ZRC.27390) showing arrangement of open pores.

***Vaillantella euepiptera* (Vaillant, 1902)**
(Fig. 1, 2, 5c)

Nemacheilus euepipterus Vaillant, 1902:137-141, Fig. 41. Type locality: Kapuas basin - Sintang?, Pontianak.

Material.- 1 specimen (ZRC.27390), Peninsular Malaysia: Pahang, Bera District, Sungai Bera, a tributary of the Sungai Pahang draining from the north-eastern corner of Tasik Bera (Fig. 3).; leg. K. Lim, D. G. B. Chia & M. E. Yeo, 2.x.1992.

Comparative material.- *Vaillantella euepiptera*: 7 specimens (MZB.3565), 49-73 mm SL, Borneo (Indonesia): Kalimantan Barat, Kapuas basin, leg. T. R. Roberts, 1976. —*Vaillantella maassi*: 10 specimens (ZRC.1481, paratypes of *Vaillantella flavofasciata*), 70-146 mm SL, Malaysia: Pahang, Kuala Tahan, leg. M. W. F. Tweedie, iii.1955. – 1 specimen (MZB.3570), 128 mm SL, Borneo (Indonesia): Kalimantan Barat, Kapuas basin, leg. T. R. Roberts, 1976.

Diagnosis.- (of ZRC.27390): Dorsal fin with iii.55 rays, pectoral fins each with 10 rays, ventral fins each with 8 rays, anal fin with iii.6 rays (7 rays if unbranched rays are counted as one), caudal fin with 19 principal rays. Total length 75 mm, standard length 62 mm, head length (from snout tip to edge of opercle) 12 mm, body depth (between dorsal base and anus) 6.5 mm, body width (at nape) 4.5 mm (7.3% SL). A slender fish (body depth 10.5% SL), laterally-compressed, with a long-based dorsal fin, anteriormost dorsal ray longest, the posterior ones becoming regressively shorter. Caudal fin deeply forked, with long, pointed lobes, the upper one of which is longer. Head short (19.4 % SL), mouth inferior with three pairs of barbels (two rostral, one maxillary) on the upper lip. Anterior nostril tubular, scales small, a series of distinct open pores on the head (Figure 2). Vertebral count, 35+17=52.

Colouration.- (based on the freshly-preserved specimen): Peppered brown on the side of

Figure 3. The section of Sungai Bera where specimen has been collected (photographed by D. G. B. Chia).

head and body, pale on the ventrum. A thin, pale lateral stripe on the sides. An irregular orange mid-dorsal stripe from nape to base of caudal peduncle which breaks into small saddles confined well above the lateral line at the base of the dorsal fin. The stripe on the predorsal is highly irregular (Figure 5c) . There is also an orange stripe on top of the head, which begins from the tip of the snout, breaks into two separate stripes above the posterior nostril, over the eyes and joins at the region between the eye and the edge of the opercle. It then divides into two again, each running down the edge of the opercle on both sides of the head. There is a fairly dark stripe from the snout through the lower half of the eye, over the opercle and to the lateral line origin. All fins are more or less hyaline with dusky pigments on the rays. Each caudal fin lobe has a dusky elongate blotch in the middle, one end of each blotch connected to the caudal base.

Ecology.- The specimen of undetermined sex, was found among leaf litter dredged from one metre off the bank of the large stream about 20 metres wide (Figure 3), from a depth of about 50 cm. The stream has a soft, clay substrate and turbid water with little current. The site was shaded by low, overhanging tree branches. Fishes collected from leaf-litter at this site include *Nemacheilus selangoricus*, *Pangio muraeniformis*, *Pangio kuhlii*, an undescribed *Pangio* and *Betta* cf. *pugnax*.

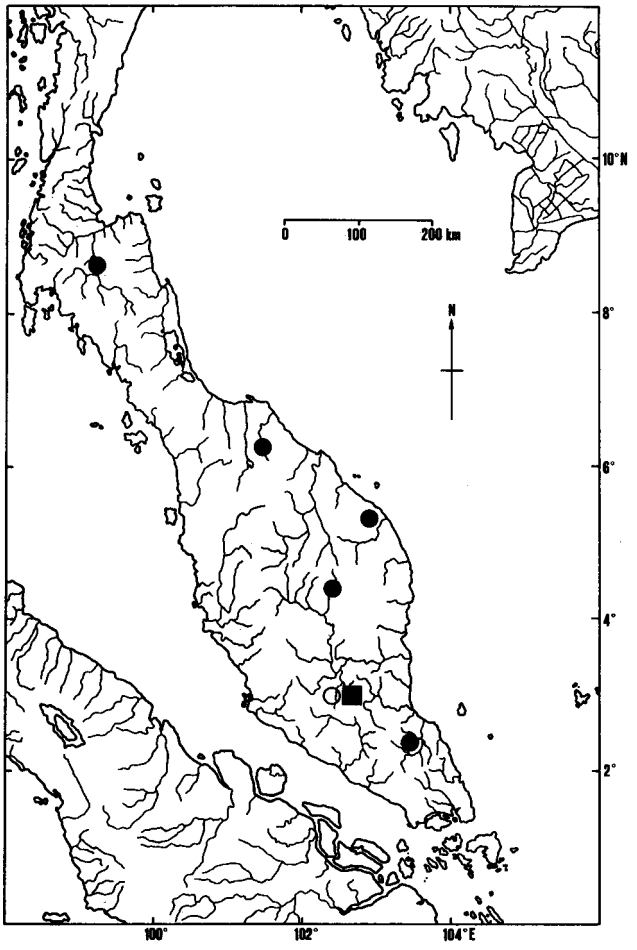

Figure 4. Map of Peninsular Malaysia showing known distribution of the genus *Vaillantella* [circle for *V. maassi*, square for *V. euepiptera*, hollow circle for unidentified specimen]

Remarks.- *Vaillantella euepiptera* differs from *Vaillantella maassi*, its only con-gener in the Malay Peninsula in having only seven (vs. 11-15) anal fin rays. The body colouration also differs in that *V. maassi* has a straight, well-defined, uninterrupted yellow (reddish to orange in Tweedie's description of *V. flavofasciata*), narrow, mid-dorsal stripe versus the irregular, often broken one in *V. euepiptera*.

A series of seven *Vaillantella euepiptera* from the Kapuas basin of Borneo (MZB.3565) has been examined. The number of dorsal fin rays are iii.55-60, pectoral fin rays 10-12, anal fin rays iii.6 or 7 (if unbranched rays are counted as one) versus 64, 12, 10 in Weber & de Beaufort (1936:37). The colouration is similar to that of the Malayan specimen, except that in some of the Bornean material, the irregular orange vertebral stripe on the predorsal is twice as wide and may be completely broken up into four distinct blotches (Figure 5a,b). In addition, the saddle-like blotches on the dorsum of some Bornean specimens extend down the sides onto the ventrum (see Roberts, 1989:109, figure 84). Vertebral counts, 33-37+16-20=50-55.

Vaillantella maassi has been found in leaf litter along the edges of large streams (see Tweedie, 1956:56,59). Cramphorn (1980:10) describes the locality at middle Sungai Nerus (Trengganu drainage) where *Vaillantella maasii*. was obtained, as "... quiet... overhung with trees. A few small sandbanks appear and the bed is sandy with submerged logs. Rotting leaves... collected into banks just below the water surface.... The river is approximately 30 to 50 metres wide...", the "fairly clear" water has a pH of 5.5. The *V. euepiptera* was collected from a habitat with a

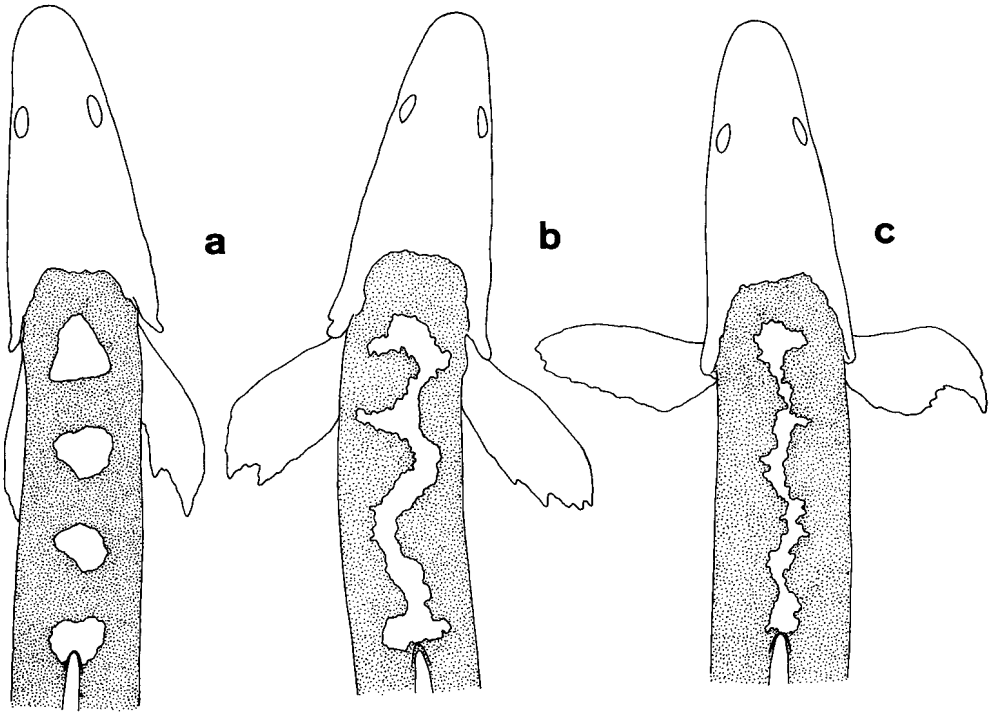

Figure 5. Predorsal markings of *Vaillantella euepiptera*: a (61 mm SL), b (67 mm SL), MZB.3565 ; c, ZRC.27390.

muddy substrate (see Ecology). Roberts (1989:109) commented that in the Kapuas basin where *V. euepiptera* and *V. maassi* both occur, the former is found in the lowlands, and the latter, in the highlands. Pending the availability of more specimens, it remains to be seen if there is a similar trend in the Malay Peninsula.

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