

# Notes on a re-examination of some Bleeker type specimens of Indo-Malayan fresh-water fishes. Part 2. Abramidinae and Rasborinae

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## INTRODUCTION

SINCE THE PUBLICATION of the first paper in this series (1961), some valuable information on the Bleeker type specimens has been given by Mees (1962, pp. 80-82). There is now little doubt that by far the most important part of the Bleeker collections is in the Rijksmuseum van Natuurlijke Historie in Leiden.

As in the previous paper, the type specimens are listed below under the generic and the specific names that they were first described. The original publication is cited in each case and this is followed on the next line, where necessary, by the synonym I have accepted. Lectotypes and Paratypes are herein designated for the first time. The measurements and counts of the Lectotypes or Holotypes are given first. The figures in brackets refer to the Paratypes. The following abbreviations are used:—ZMA = Zoologisch Museum, Amsterdam; BM = British Museum (Natural History), London; ML = Rijksmuseum van Natuurlijke Historie, Leiden.

I have not been able to locate the types of some of the Rasborinae. Of these, the types of *Barbus podonemus* (1850) and *Leuciscus einthovenii* (1851) are not included in the collections in Leiden, London and Amsterdam. The types of *Leuciscus argyrotaenia* (1850), *L. cyanotaenia* (1850) and *L. schwenkii* (1858) are, however, probably mixed within the large Bleeker series of *Rasbora argyrotaenia* (Bleeker) in Leiden.

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## Subfamily ABRAMIDINAE

### *Chela hypophthalmus* Bleeker.

*Act. Soc. Sci. Indo-Neerl.*, 1860, vol. 7, p. 471.

LECTOTYPE: ML 4985, Palembang, Sumatra.

PARATYPE: BM 1866.5.2.218, same data.

Dorsal ii.7 (iii.7); anal iii.29 (iii.29); pectoral i.12 (i.12); ventral i.6 (i.7). Caudal fins damaged; total length according to Bleeker, 155 & 165 mm.; standard length 118.5 mm. (130.0 mm.); depth 3.3 (3.0); head 4.6 (4.8); eye (3.0); snout (3.4). Lateral line 59 (56); transverse scales 12/1/8 (11½/1/7); caudal peduncular scales 6/1/4. Pectoral fins reaching anus.



A silvery stripe from the upper corner of the opercle to the caudal base.

**Leuciscus helfrichii** Bleeker.

*Act. Soc. Sci. Indo-Neerl.*, 1857, vol. 2, p. 15.

=*Rasborichthys helfrichii* (Bleeker).

LECTOTYPE: BM 1866.5.2.162, River Kahajan, Borneo, C. Helfrich.

PARATYPE: ML 4970, same data.

Dorsal ii.7 (ii.7); anal iii.19 (iii.18); pectoral ii.15 (ii.14); ventral ii.8 (ii.8). Total length 90.0 mm. (116.0 mm.); standard length 74.0 mm. (90.7 mm.); depth 4.5 (4.7); head 4.1 (4.4); eye 3.0 (3.5); snout 4.0 (3.9). Lateral line 61 (57); transverse scales  $10\frac{1}{2}/1/6\frac{1}{2}$  ( $10/1/7\frac{1}{2}$ ); caudal peduncular scales  $8\frac{1}{2}/1/6$  ( $8/1/5\frac{1}{2}$ ).

More or less uniform silvery brown.

**Leuciscus oxygastroides** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1852, vol. 3, p. 431.

=*Chela oxygastroides* (Bleeker).

LECTOTYPE: BM 1866.5.2.216, River Kusan, Prabukarta, Borneo, J. H. Croockewit, or River Mussi, Palembang, Sumatra, J. M. van Leer or Batavia, Java, P. Bleeker.

PARATYPES (5): ML 4984, same data.

(1): ML 8062, same data.

The specimens have been mixed and I have no way of separating them by locality. The lectotype is also the holotype of *C. megalolepis* Gunther.

Dorsal ii.7 (ii.7); anal iii.28 (iii.23–29); pectoral i.12 (i.11–i.13); ventral i.6 (i.6). Total length 123.0 mm. (44.5–143.0 mm.); standard length 100.0 mm. (36.4–117.6 mm.); depth 3.6 (3.1–3.6); head 4.4 (4.1–4.7); eye 3.0; snout 3.8. Most scale counts not possible. In ML 8062, lateral line 39, transverse scales  $10/1/6$ , caudal peduncular scales  $6/1/2$ . Pectoral fins not reaching anus.

A mid-lateral silvery stripe from the head to the caudal base.

**Leuciscus uranoscopus** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1851, vol. 1, p. 14.

=*Macrochirichthys macrochirus* (Valenciennes).

HOLOTYPE: ML 7494, Banjermassin, Borneo, J. Wolff.

Dorsal iii.7; anal iii.24; pectoral i.16; ventral i.7. Total length 324.0 mm.; standard length 270.0 mm.; depth 5.1; head 5.3; eye 4.6; snout 3.4. Lateral line 106; other scale counts not possible.

More or less silvery yellow with a dark spot on the caudal base.

Subfamily RASBORINAE

**Leuciscus bankanensis** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1853, vol. 5, p. 192.

=*Rasbora bankanensis* (Bleeker).

HOLOTYPE: BM 1866.5.2.160, Marawang, Banka, H.L. van Bloemen Waanders.



Dorsal ii.7; anal iii.5; pectoral i.14; ventral i.7. Total length about 64.0 mm.; standard length 46.0 mm.; depth 3.6; head 3.5; eye 3.1; snout 3.3. Lateral line (partly estimated) 24; count not possible for transverse scales; predorsals (partly estimated) 10; caudal peduncular scales  $3\frac{1}{2}/1/1\frac{1}{2}$ . Dorso-hypural distance, carried forwards, falling on posterior orbital rim. Dorsal origin behind base of ventrals.

A pronounced supra-anal stripe, continued backwards along the caudal peduncle. The distal half of the 3rd—5th anal rays with a pronounced black patch.

**Leuciscus cephalotaenia** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1852, vol. 3, p. 97.

= *Rasbora cephalotaenia* (Bleeker).

LECTOTYPE: BM 1866.5.2.151, River Tjirutjup, Biliton, C. de Groot.

PARATYPES (5): ML 4982, same data.

Dorsal ii.7 (ii.7—iii.7); anal iii.5 (iii.5); pectoral i.15 (i.13—i.14) ventral i.9 (i.8). Caudal fins damaged; total length according to Bleeker 85–103 mm.; standard length 65.0 mm. (65.6–75.5 mm.); depth 4.0 (3.6–4.2); head 4.0 (3.5–3.6); eye 3.6 (3.7–4.1); snout 3.3 (3.0–3.2). Lateral line 30 (28–31); transverse scales  $5\frac{1}{2}/1/3\frac{1}{2}$ ; predorsals 12 (11–12); caudal peduncular scales  $3\frac{1}{2}/1/1\frac{1}{2}$  ( $3\frac{1}{2}/1/1\frac{1}{2}$ ). Dorso-hypural distance, carried forwards, falling on or between anterior orbital rim and centre of pupil. In the Lectotype the dorsal origin is opposite the 10th scale of the lateral line; the ventral is opposite the 9th and the anal opposite the 17th.

A dark stripe from the tip of the lower jaw to the edge of the opercle, continued as two rows of spots to the caudal base where there is a large spot, thence continued backwards as a weak stripe to the edge of the caudal.

**Leuciscus dusonensis** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1851, vol. 1, p. 14.

= *Rasbora dusonensis* (Bleeker).

HOLOTYPE: ML 7037, River Banjar or River Duson, Banjermassin, Borneo, J. Wolff.

Dorsal ii.7; anal iii.5; pectoral i.15; ventral i.8. Total length 114 mm.; standard length 89.2 mm.; depth 3.8; head 4.0; eye 4.3; snout 3.4. Lateral line (partly estimated) 27; count not possible for transverse scales; predorsals 12; caudal peduncular scales  $4\frac{1}{2}/1/1\frac{1}{2}$ . Dorso-hypural distance, carried forwards, falling opposite centre of pupil.

The specimen is in poor condition. Only a weak reticulate colouration is visible.

**Leuciscus kalochroma** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1851, vol. 1, p. 272.

= *Rasbora kalochroma* (Bleeker).

LECTOTYPE: ML 4983, River Banjar or River Duson, Banjermassin, Borneo, J. Wolff.

PARATYPES (5): ML 9045, same data.

(1): BM 1866.5.2.156, same data.



Dorsal ii.7 (ii.7); anal iii.5 (iii.5); pectoral i.13 (i.12-i.13); ventral i.7 (i.7). Caudal fins damaged; total length according to Bleeker, 62-85 mm.; standard length 64.5 mm. (53.6-66.2 mm.); depth 3.9 (3.7-4.1); head 3.9 (3.7-4.1); eye 3.9 (3.3-4.9); snout 3.4 (3.3-4.6). The specimens are in poor condition and the scale counts are partly estimated. Lateral line 26 (25-27); transverse scales  $4\frac{1}{2}/1/2\frac{1}{2}$  ( $4\frac{1}{2}/1/2\frac{1}{2}$ ); predorsals 12 (11-12); caudal peduncular scales  $3\frac{1}{2}/1/2\frac{1}{2}$  ( $3\frac{1}{2}/1/2\frac{1}{2}$ ). Dorso-hypural distance, carried forwards, falling between anterior orbital rim and centre of pupil.

The distinctive body markings as originally described, are still clearly seen.

**Leuciscus lateristriatus** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1854, vol. 7, p. 94, p.p.

= *Rasbora lateristriata* (Bleeker).

LECTOTYPE: ML 4969, Batavia, Tandjongoost, Tjampea, Bandung and Garut, Java.

PARATYPES (3): ML 9098, same data.

(1): ZMA 103232, same data.

(3): ML 17486, Lake Meninju, Pajacombo and Telok Betong, Sumatra.

(1): BM 1866.5.2.163, same data.

Although the species was originally described from both Java and Sumatra, Brittan (1954, p. 37) was able to assign to this species specimens from only Java. It is of interest therefore that the type series I have examined consists partly of *R. lateristriata* and partly of *R. sumatrana* (Bleeker). Unfortunately, the specimens are all mixed and none have precise locality labels. I have, however, provisionally assigned the specimens of *sumatrana* to the Sumatran type localities and the *lateristriata* to the localities in Java. The following description is of the first 5 specimens listed above.

Dorsal ii.7 (ii.7); anal iii.5 (iii.5); pectoral i.13 (i.12-i.13); ventral i.8 (i.7-i.8). Total length 60.0 mm. (60.5-77.2 mm.); standard length 43.4 mm. (45.6-57.8 mm.); depth 3.8 (3.8-4.3); head 4.1 (3.7-4.0); eye 3.0 (3.7-4.8); snout 3.3 (3.5-3.7). Lateral line 27 (27-28); transverse scales  $4\frac{1}{2}/1/2\frac{1}{2}$  ( $4\frac{1}{2}/1/2\frac{1}{2}$ ); predorsals 13 (12-13); caudal peduncular scales  $3\frac{1}{2}/1/1\frac{1}{2}$  ( $3\frac{1}{2}/1/1\frac{1}{2}$ ). Dorso-hypural distance, carried forwards, falling on pupil.

A silvery-leadened lateral stripe mainly on the 3rd transverse scale row, running from slightly behind the head to the caudal base where it widens. Overlying this stripe is a dark lateral stripe running from the snout to the caudal base where it ends in a dark spot. A distinct oval supra-anal spot. Margins of dorsal, anal and caudal, black.

**Leuciscus leptosoma** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1855, vol. 9, p. 269.

= *Rasbora leptosoma* (Bleeker).

LECTOTYPE: ML 4981, Lahat, Sumatra, P.L. van Bloemen Waanders.

PARATYPE: BM 1866.5.2.157, same data.

Dorsal ii.7 (ii.7); anal iii.5 (iii.5); pectoral i.12 (i.14); ventral i.7 (i.7). Total length 91.5 mm. (64 mm.); standard length 65.4 mm. (47.9 mm.); depth 4.2 (4.2); head 3.9 (4.3); eye 4.2 (3.5); snout 3.7 (3.4). Lateral line 25 (estimated 25); predorsals 10 (10); caudal peduncular scales  $3\frac{1}{2}/1/1\frac{1}{2}$  ( $3\frac{1}{2}/1/1\frac{1}{2}$ ). Dorso-hypural distance, carried forwards, falling between eye and nostril.

Colouration, as originally described.



**Leuciscus sumatranus** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1852, vol. 3, p. 601.

= *Rasbora sumatrana* (Bleeker).

LECTOTYPE: ML 7038, Solok, Sumatra, H. W. Schwanefeld.

PARATYPES (1): ML 8909, same data.

(1): BM 1866.5.2.161, same data.

Dorsal ii.7 (ii.7), anal iii.5 (iii.5); pectoral i.13 (i.14 & i.13); ventral i.8 (i.8 & i.7). Caudal fins damaged; total length according to Bleeker, 85–115 mm.; standard length 77.0 mm. (68.1 & 61.4 mm.); depth 3.9 (3.9 & 3.7); head 3.6 (3.5 & 3.4); eye 3.8 (3.5 & 3.4); snout 3.3 (3.1). Lateral line 23 (22 & 23); transverse scales  $4\frac{1}{2}/1/2\frac{1}{2}$  ( $4\frac{1}{2}/1/2\frac{1}{2}$ ); predorsals 10 (11 & 10); caudal peduncular scales  $3\frac{1}{2}/1/1\frac{1}{2}$  ( $3\frac{1}{2}/1/1\frac{1}{2}$ ). Dorso-hypural distance, carried forwards, falling between anterior orbital rim and centre of pupil.

The dark lateral streak is not noticeable but the precaudal spot and supra-anal pigment are still clearly seen.

**Leuciscus trinema** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1852, vol. 3, p. 600.

= *Luciosoma trinema* (Bleeker).

HOLOTYPE: BM 1866.5.2.98, Palembang, Sumatra, J. M. van Leer.

Dorsal ii.7; anal iii.6; pectoral i.15; ventral i.8. Caudal fin damaged; total length according to Bleeker, 175 mm.; standard length 134.5 mm.; depth 4.6; head 4.0; eye 4.6; snout 3.0. Lateral line 43; transverse scales  $5\frac{1}{2}/1/4\frac{1}{2}$ ; predorsals 21; caudal peduncular scales  $3\frac{1}{2}/1/2\frac{1}{2}$ . A pair of maxillary barbels, equal to 0.07 times eye diameter.

The markings as originally described, are still clearly seen.

**Luciosoma spilopleura** Bleeker.

*Nat. Tijdschr. Ned. Indie*, 1855, vol. 9, p. 265.

HOLOTYPE: BM 1866.5.2.97, Lahat, Sumatra, P. L. van Bloemen Waanders.

Dorsal iii.7; anal iii.6; pectoral i.14; ventral i.8. Caudal fin damaged; total length according to Bleeker, 108 mm.; standard length 79.5 mm.; depth 4.8; head 3.7; eye 4.3; snout 3.3. Lateral line (estimated from scale pockets) 39; caudal peduncular scales  $3\frac{1}{2}/1/1\frac{1}{2}$ ; other scale counts not possible. Barbels well developed; rostrals 3.1 times length of maxillary pair and equal to 2.4 times eye diameter.

The specimen is in poor condition and has lost most of its scales. There is no indication of the original body markings. However, each caudal lobe has a dark longitudinal band.

**Rasbora borneensis** Bleeker.

*Act. Soc. Sci. Indo-Neerl.*, 1860, vol. 7, p. 450.

LECTOTYPE: BM 1866.5.2.155, River Banjer or River Duson, Banjarmassin, Borneo, J. Wolff.

PARATYPE: ML 7497, same data.



Dorsal ii.7 (ii.7); anal iii.5 (iii.5); pectoral i.14 (i.13); ventral i.8 (i.8). Total length 63.0 mm. (71.8 mm.); standard length 47.9 mm. (55.0 mm.); depth 4.2 (4.5); head 4.3 (4.7); eye 3.5 (3.3); snout 3.4 (3.7). Lateral line (estimated) 31 (27); transverse scales (estimated)  $4\frac{1}{2}/1/3\frac{1}{2}$ ; predorsals 14 (13); caudal peduncular scales  $4\frac{1}{2}/1/1\frac{1}{2}$  ( $4\frac{1}{2}/1/1\frac{1}{2}$ ). Dorso-hypural distance, carried forwards, falling opposite posterior orbital rim.

A silvery lateral stripe from opposite the dorsal origin becoming more distinct posteriorly and ending before the caudal base.

### **Rasbora macrocephalus** Bleeker.

*Atlas Ichth.*, 1865, vol. 3, p. 126, pl. 103, fig. 10.

LECTOTYPE: ML 2635, Krawang, Java, S. Muller.

PARATYPES (2): ML 10458, same data.

(2): ML 7039, Krawang, Java, P. Bleeker.

(1): BM 1866.5.2.150, same data.

Dorsal ii.8 (ii.7); anal iii.5 (iii.5); pectoral i.13 (i.12–i.14); ventral i.8 (i.7–i.8). Total length 74.6 mm. (57.0–67.6 mm.); standard length 57.6 mm. (45.9–56.5 mm.); depth 5.0 (4.3–5.0); head 3.8 (3.5–3.8); eye 4.1 (4.0–4.5); snout 3.6 (3.5–3.8). Lateral line 30 (25–27); transverse scales  $4\frac{1}{2}/1/2\frac{1}{2}$  ( $4\frac{1}{2}/1/2\frac{1}{2}$ ); predorsals 12 (11–13); caudal peduncular scales  $3\frac{1}{2}/1/1\frac{1}{2}$  ( $3\frac{1}{2}/1/1\frac{1}{2}$ ). Dorso-hypural distance, carried forwards, falling between nostril and orbit.

A silvery lateral stripe. No other markings.

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<sup>1</sup> A reconstruction of the dates of publication of the instalments of the *Atlas Ichthyologique* is given by Mees (1962, pp. 75-78).