

***Filimanus heptadactyla* (Cuvier, 1829)**

Fig. 47; Plate Id

Polynemus heptadactylus Cuvier in Cuvier and Valenciennes, 1829: 390 (type locality: Jakarta, Java, Indonesia, based on a drawing; no types known, see Feltes, 1991).

Synonyms: None.

FAO Names: **En** - Sevenfinger threadfin; **Fr** - Barbure à sept doigts; **Sp** - Barbudo de siete dedos.

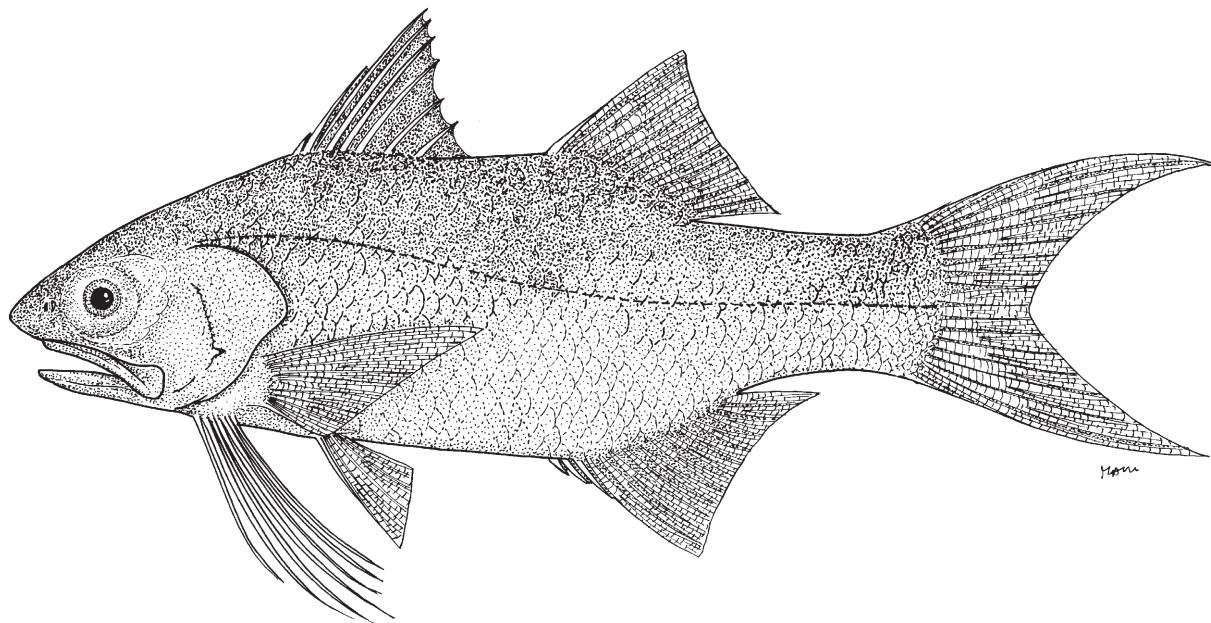


Fig. 47 *Filimanus heptadactyla*

Diagnostic Features: A small species. Body depth at first dorsal-fin origin 28 to 33% (mean 31%) of standard length; head length 28 to 33% (mean 31%) of standard length. Snout pointed; occipital profile nearly straight. Posterior margin of maxilla extending beyond level of posterior margin of adipose eyelid; upper-jaw length 14 to 16% (mean 15%) of standard length; depth of posterior margin of maxilla less than eye diameter; lip on lower jaw well developed, dentary teeth restricted to dorsal surface; teeth villiform in narrow bands on palatines and ectopterygoids; vomer with an inconspicuous tooth plate. Posterior margin of preopercle serrated. First dorsal fin with VIII spines, all spine bases of similar thickness; second dorsal fin with I spine and 12 or 13 (mode 12) soft rays; anal fin with III spines and 11 or 12 (mode 11) soft rays, anal-fin base approximately equal to or greater than second dorsal-fin base; pectoral fin with 14 to 16 (mode 15) unbranched rays, its length 23 to 29% (mean 26%) of standard length, posterior tip just short of level of posterior tip of pelvic fin; pectoral filaments 7, first filament shortest, not reaching to level of posterior margin of pelvic fin; third and fourth filaments usually longest, its length 28 to 40% (mean 34%) of standard length, reaching to level of pelvic-fin origin; caudal fin deeply forked, upper and lower caudal-fin lobes not filamentous, upper caudal-fin lobe 28 to 40% (mean 35%) of standard length. Pored lateral-line scales 46 to 49 (mode 48); lateral line simple, extending from upper end of gill opening to mid-distal margin of caudal-fin membrane; scale rows above lateral line 6 or 7 (mode 6), below 9 or 10 (mode 10). Gillrakers (total) 35 to 41 (mode 39). Vertebrae 10 precaudal and 14 caudal; supraneural bones 3. Swimbladder simple.

Colour: Upper sides of head and trunk with brown tinge, becoming golden on lower sides; posterior margins of first, second dorsal, anal and caudal fins blackish, remaining areas translucent or yellowish; pectoral fin mostly black; pectoral filaments white or yellowish white; pelvic-fin anterior margin yellow, elsewhere white; anal-fin base yellow, elsewhere yellowish white.

Geographical Distribution: Distributed in the western Pacific where it ranges from Thailand, Malaysia (east coast of Malay Peninsula) and Indonesia (Java, Kalimantan, and Moluccas) to Papua New Guinea (Gulf of Papua) (Fig. 48).

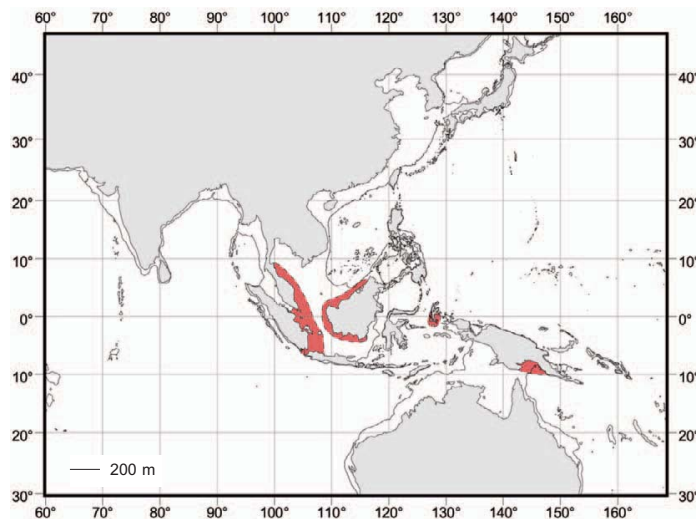


Fig. 48 *Filimanus heptadactyla*
■ Known distribution

Habitat and Biology: See above under genus account. No other data are available.

Size: Maximum standard length at least 13 cm (Feltès, 1991).

Interest to Fisheries: None.

Local Names: INDONESIA: Laas, Laos; PAPUA NEW GUINEA: Seven-fingered threadfin.

Literature: Feltès (1991); Feltès *in* Carpenter and Niem (2001).

Remarks: *Polydactylus heptadactylus* was described as a new species on the basis of a drawing (reproduced *in* Feltès, 1991: 313, fig. 9) from Jakarta, Java, Indonesia. Subsequently, many researchers (e.g. Marathe and Bal, 1958; Nayak, 1959b; Kagwade, 1970) have misidentified *F. similis*, *Polydactylus mullani* and *P. sextarius* as *F. heptadactyla*. *Polydactylus mullani* and *P. sextarius* can be easily distinguished from *F. heptadactyla* by the presence of a large black anterior lateral-line spot (absent in the latter). *Filimanus heptadactyla*, distributed in the western Pacific, is similar to *F. similis*, distributed in the eastern Indian Ocean, in having 7 pectoral filaments not reaching to level with the midpoint of the anal-fin base. However, the former differs from *F. similis* in having lower gill-raker counts [35 to 41 (mode 39) versus 40 to 49 (mode 43) in the latter].

***Filimanus hexanema* (Cuvier, 1829)**

Fig. 49; Plate Ie

Polynemus hexanema Cuvier *in* Cuvier and Valenciennes, 1829: 389 (type locality: Jakarta, Java, Indonesia, based on a drawing; no types known, see Feltès, 1991).

Synonyms: *Polynemus senarius* Gronow *in* Gray, 1854: 176 [type locality: Indian Ocean, but probably erroneous, see Feltès, 1991; holotype (BMNH 1853.11.12.59, 99 mm standard length)].

FAO Names: **En** - Javanese threadfin; **Fr** - Barbure de Java; **Sp** - Barbudo javanés.

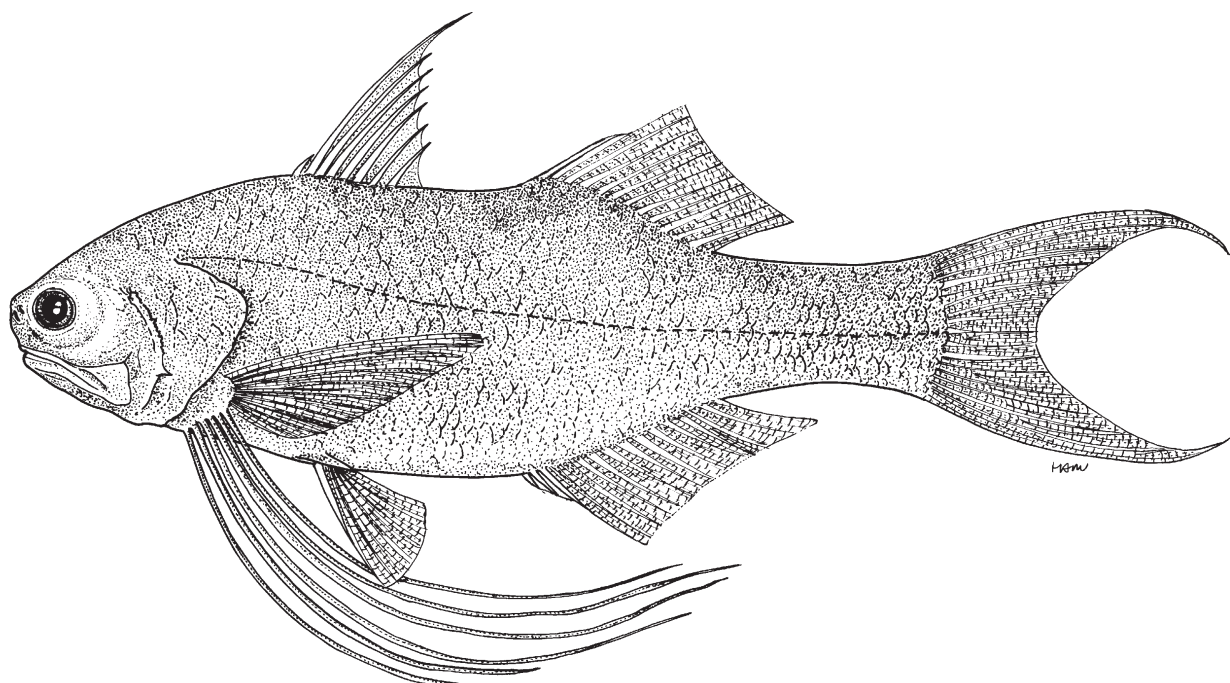


Fig. 49 *Filimanus hexanema*

Diagnostic Features: A small species. Body depth at first dorsal-fin origin 29 to 32% (mean 30%) of standard length; head length 28 to 31% (mean 29%) of standard length. Snout blunt, interorbital region of frontals not markedly concave. Posterior margin of maxilla extending beyond level of posterior margin of adipose eyelid; upper-jaw length 14 to 15% (mean 15%) of standard length; lip on lower jaw well developed, dentary teeth restricted to dorsal surface; teeth villiform in narrow bands on palatines and ectopterygoids; vomer with an inconspicuous tooth plate lacking teeth. Posterior margin of preopercle serrated. First dorsal fin with VIII spines, all spine bases of similar thickness; second dorsal fin with I spine and 11 or 12 (mode 12) soft rays; anal fin with III spines and 14 soft rays, anal-fin base longer than second dorsal-fin base; pectoral fin with 14 or 15 (mode 14) unbranched rays, its length 31 to 42% (mean 36%) of standard length, posterior tip extending beyond level of posterior tip of pelvic fin (sometimes reaching to level of anal-fin origin); pectoral filaments 6, first filament shortest, just short of level of anal-fin origin; second filament extending beyond level of posterior part of anal-fin base; third and fourth filaments usually longest, its length 66 to 81% (mean 74%) of standard length, extending beyond level of midpoint of anal-fin base (sometimes extending beyond level of midpoint of caudal peduncle); caudal fin deeply forked, upper and lower caudal-fin lobes not filamentous, upper caudal-fin lobe 30 to 42% (mean 34%) of standard length. Pored lateral-line scales 49 or 50 (mode 50); lateral line simple, extending from upper end of gill opening to mid-distal margin of caudal-fin membrane; scale rows above lateral line 6 or 7 (mode 6), below 9 or 10 (mode 10). Gillrakers (total) 43 to 48 (mode 45). Vertebrae 10 precaudal and 14 caudal; supraneural bones 2. **Colour:** Body uniformly silver; posterior margins of first, second dorsal, anal, and caudal fins blackish, remaining parts translucent or yellowish; pectoral fin with scattered melanophores; pectoral filaments white; anterior margin of pelvic fin white, other parts translucent.

Geographical Distribution: Known only from western Java, Indonesia (off Jakarta, Serang and Labuhan) (Fig. 50).

Habitat and Biology: Nothing has been published on the biology of this rare species.

Size: Maximum standard length at least 12 cm (Feltes, 1991).

Interest to Fisheries: None.

Local Names: None known.

Literature: Feltes (1991); Motomura *et al.* (2001a); Feltes *in* Carpenter and Niem (2001).

Remarks: *F. hexanema* appears to be one of the rarest polynemids. It is similar to *F. perplexa* in having long pectoral filaments, extending beyond level with the midpoint of the anal-fin base, but differs from the latter in having lower counts of pectoral filaments (6 versus 7 in the latter) and gillrakers [44 to 48 (mode 45) versus 47 to 55 (mode 50)], and a shallower body depth [29 to 32% (mean 30%) of standard length versus 32 to 37% (mean 36%) of standard length].

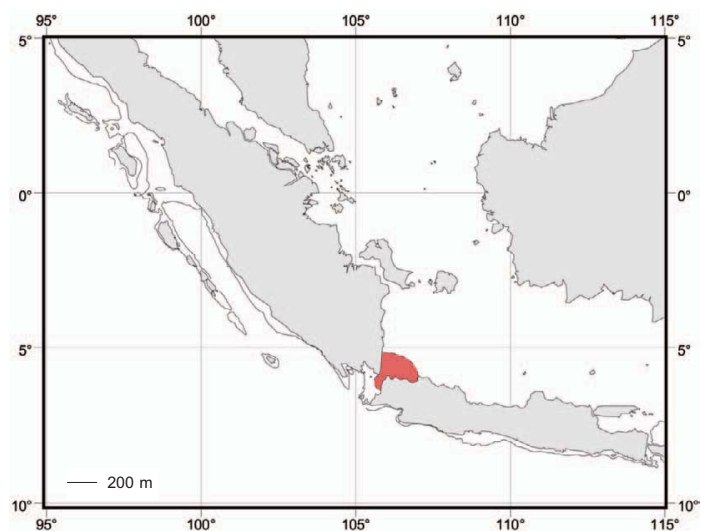


Fig. 50 *Filimanus hexanema*
 Known distribution

***Filimanus perplexa* Feltes, 1991**

Fig. 51; Plate If

Filimanus perplexa Feltes, 1991: 307, fig. 5 [type locality: northwest of Denpasar, Bali, Indonesia; holotype (BMNH 1988.4.6.1, 148 mm standard length); 23 paratypes (BMNH 1988.4.6.2, 155 mm standard length; BMNH 1988.4.6.3, 146 mm standard length; BMNH 1988.4.6.4, 121 mm standard length; BMNH 1988.4.6.5, 156 mm standard length; BMNH 1988.4.6.6, 104 mm standard length; BMNH 1988.4.6.7, 105 mm standard length; BMNH 1988.4.6.8, 148 mm standard length; BMNH 1988.4.6.9, 157 mm standard length; BMNH 1988.4.6.10, 104 mm standard length; CAS 59177, 134 mm standard length; FMNH 97100, 2 specimens, 109 to 118 mm standard length; MCZ 30869, 104 mm standard length; MNHN A. 3054, 68 mm standard length; NMW 12479, 79 mm standard length; NMW 12548, 3 specimens, 84 to 107 mm standard length; NMW 12549, 2 specimens, 71 to 86 mm standard length; NMW 22598, 107 mm standard length; USNM 72742, 114 mm standard length; USNM 280288, 115 mm standard length)].

Synonyms: None.

FAO Names: En - Splendid threadfin; Fr - Barbure magnifique; Sp - Barbudo espléndido.

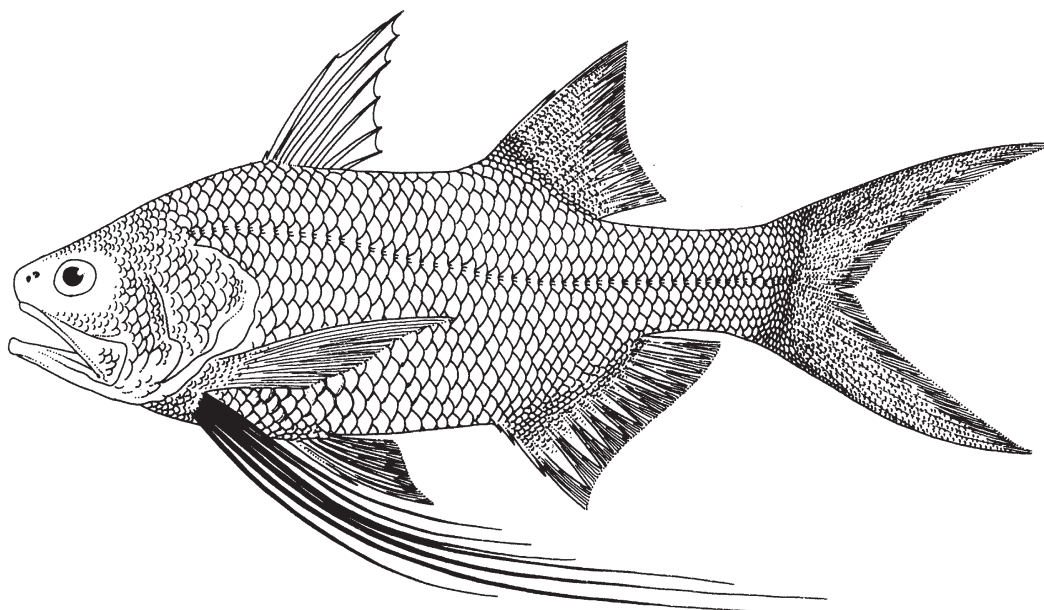


Fig. 51 *Filimanus perplexa*

Diagnostic Features: A small species. Body moderately deep, body depth at first dorsal-fin origin 32 to 37% (mean 34%) of standard length; head length 30 to 34% (mean 32%) of standard length. Snout blunt, interorbital region of frontals slightly concave. Posterior margin of maxilla extending beyond level of posterior margin of adipose eyelid; upper-jaw length 15 to 18% (mean 17%) of standard length; lip on lower jaw well developed, dentary teeth restricted to dorsal surface; teeth villiform in narrow bands on palatines and ectopterygoids; vomer with an inconspicuous tooth plate. Posterior margin of preopercle serrated. First dorsal fin with VIII spines, second spine slightly more robust than others; second dorsal fin with I spine and 11 soft rays; anal fin with III spines and 13 to 15 (mode 14) soft rays, anal-fin base longer than second dorsal-fin base; pectoral fin with 13 or 14 (mode 14) unbranched rays, its length 31 to 49% (mean 35%) of standard length, posterior tip extending beyond level of posterior tip of pelvic fin (sometimes reaching to level of anal-fin origin); pectoral filaments 7, first filament shortest, just short of (or reaching to) level of anal-fin origin; third and fourth filaments usually longest, its length 56 to 118% (mean 92%) of standard length, extending well beyond level of midpoint of anal-fin base (sometimes extending beyond level of fork of caudal fin); caudal fin deeply forked, upper and lower caudal-fin lobes not filamentous, upper caudal-fin lobe 31 to 56% (mean 44%) of standard length. Pored lateral-line scales 49 to 51 (mode 50); lateral line simple, extending from upper end of gill opening to mid-distal margin of caudal-fin membrane; scale rows above lateral line 5 to 8 (mode 6), below 9 or 10 (mode 10). Gillrakers (total) 47 to 55 (mode 50). Vertebrae 10 precaudal and 14 caudal; supraneural bones 2. Swimbladder simple. **Colour:** Body and fins fawn to yellow; fins yellowish white; base of pectoral filaments white, becoming light brown on posterior tips; pectoral fin with scattered melanophores (intensity of pectoral-fin pigmentation variable).

Geographical Distribution: Known only from Padang (east side of Sumatra), Nias (west side of Sumatra), Java and Bali, Indonesia, and Phuket, Thailand (Fig. 52). The record from Andaman Sea is based only on a single specimen (PMBC 5913, 111 mm standard length).

Habitat and Biology: See above under genus account. No other data are available.

Size: Maximum standard length at least 16 cm (Feltes, 1991).

Interest to Fisheries: None.

Local Names: INDONESIA: Char-wen-e-kerning.

Literature: Feltes (1991); Motomura, Satapoomin and Iwatsuki. (2000); Feltes *in* Carpenter and Niem (2001).

Remarks: *F. perplexa* was described as a new species by Feltes (1991). Bleeker (1849, 1855, 1856, 1857a, 1859, 1860) erroneously referred to this species as *Polynemus melanochir*, that name being used for *F. perplexa* by many subsequent authors (e.g. Volz, 1903; Bean and Weed, 1912; Myers, 1936). Although Feltes (1991) described *F. perplexa* on the basis of 26 specimens, he listed only 24 type specimens in his paper. The present whereabouts of remaining 2 type specimens are unknown. Comparisons of *F. perplexa* with a related species, *F. hexanema*, are given in the account of the latter.

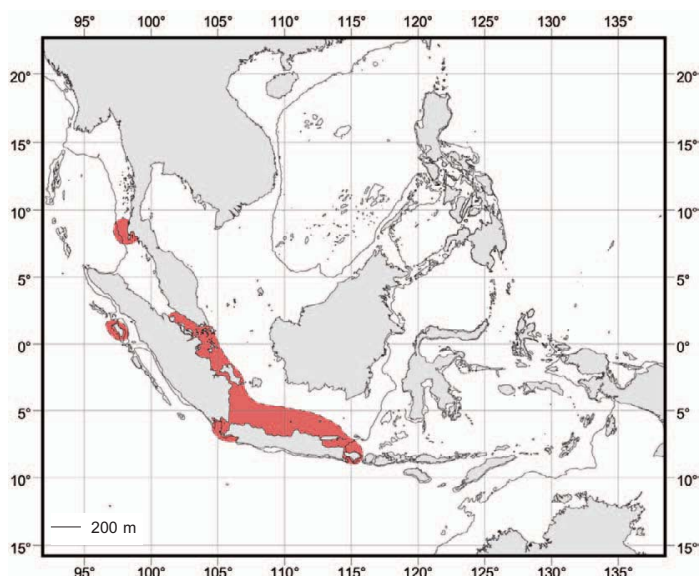


Fig. 52 *Filimanus perplexa*

Known distribution