black, that species has villiform vomerine teeth. The vomer and pectoral fin characters of ***P. m. dulcis*** and ***P. m. melanochir*** are very similar. Furthermore, the meristic characters of both subspecies completely overlap (see Motomura and Sabaj, 2002: table 3). However, ***P. m. dulcis*** differs from the latter in having a greater snout length [7% of standard length versus 5 to 6% (mean 6%) of standard length in the latter; see Motomura and Sabaj, 2002: tables 1-2, figs. 4-5] and shorter upper caudal-fin lobe length [34 to 35% (mean 35%) of standard length versus 34 to 44% (mean 39%) of standard length; see Motomura and Sabaj, 2002: tables 1-2, fig. 5].

In addition, the head length [27 to 28% (mean 28%) of standard length], eye diameter (3%), orbit diameter [3 to 4% (mean 3%)], upper-jaw length [14 to 15% (mean 14%)], second dorsal-fin base length [20 to 21% (mean 21%)] and longest pelvic-fin ray length [17 to 18% (mean 18%)] in ***P. m. dulcis*** are greater than those in ***P. m. melanochir*** [24 to 27% (mean 26%), 1 to 2% (mean 2%), 2 to 3% (mean 2%), 12 to 14% (mean 13%), 18 to 21% (mean 20%) and 14 to 17% (mean 16%), respectively; see Motomura and Sabaj, 2002: tables 1-2].

Polynemus m. dulcis appears to be one of the rarest polynemids and only 3 type specimens are known from museum collections.

Polynemus melanochir melanochir Valenciennes, 1831 — **Fig. 146; Plates VIf**

Polynemus melanochir Valenciennes *in* Cuvier and Valenciennes, 1831: 513 [mistakenly reported from India (see Motomura and Sabaj, 2002), based solely on a drawing sent from Sumatra, Indonesia (see Feltes, 1991: fig. 1); type locality: Kuching Bay, Sarawak, Kalimantan, Malaysia, based on a neotype (ZRC 37829, 179 mm standard length) designated by Motomura and Sabaj, 2002].

Synonyms: ***Polynemus macronema*** Bleeker, 1852 (not of Pel): 419 (primary homonym of ***Polynemus macronemus*** Pel). ***Polynemus borneënsis*** Bleeker, 1857b: 3 (replacement name for ***P. macronema*** Bleeker, but incorrect original spelling). ***Polynemus borneensis*** Bleeker, 1858a: 2 [type locality: Banjarmasin, Pontianak and Sampit, Kalimantan, Indonesia; justified emendation of ***P. borneënsis*** Bleeker; 3 syntypes (RMNH 6013, 148 to 190 mm standard length) determined from 5 Bleeker specimens by Motomura and Sabaj, 2002]. ***Galeoides microps*** Steindachner, 1869a: 126 [type locality: China (but probably erroneous, see Motomura and Sabaj, 2002); holotype (NMW 77569, 171 mm standard length)]. ***Polynemus melanopus*** Sauvage, 1881: 101 [type locality: Saigon (= Ho-chi-minh), Viet Nam; 4 syntypes (MNHN A. 3048, 2 specimens, 139 to 160 mm standard length; MNHN A. 3049, 2 specimens, 130 to 160 mm standard length)]. ***Trichidion hilleri*** Fowler, 1905: 502, fig. 11 [type locality: Baram River, Sarawak, Kalimantan, Malaysia; holotype (ANSP 114895, 166 mm standard length)].

FAO Names: En - Blackhand paradise fish; **Fr** - Barbure paradis à doigts noirs; **Sp** - Barbudo paraíso de mano negra.

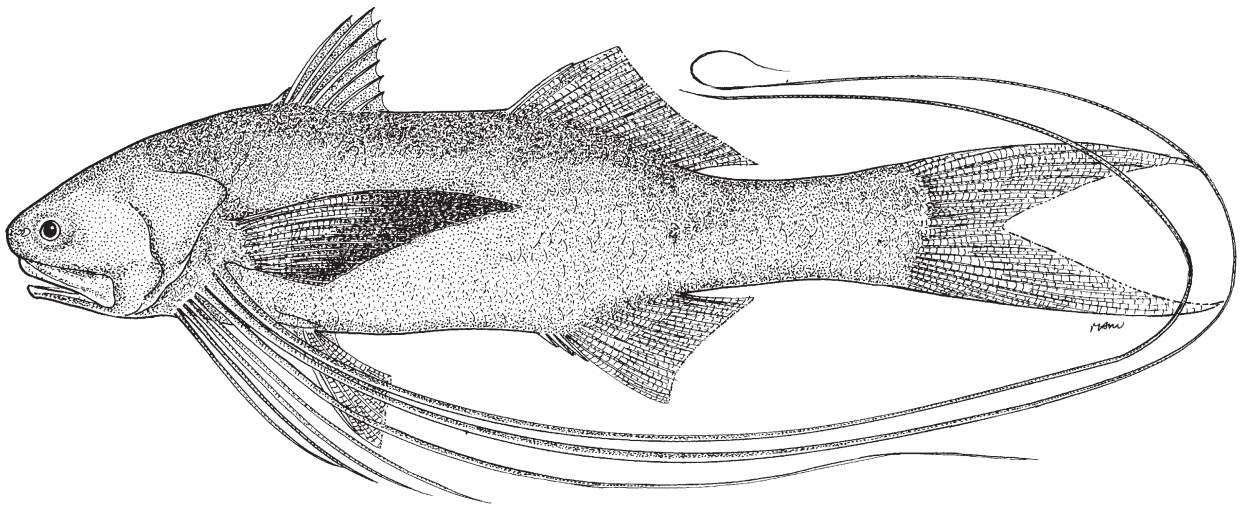

Fig. 146 ***Polynemus melanochir melanochir***

Diagnostic Features: A medium-sized species. Body depth at first dorsal-fin origin 22 to 25% (mean 23%) of standard length; head length 25 to 27% (mean 26%) of standard length. Snout pointed; occipital profile nearly straight. Posterior margin of maxilla extending well beyond level of posterior margin of adipose eyelid; upper-jaw length 12 to 14% (mean 13%) of standard length, greater than caudal-peduncle depth [10 to 13% (mean 11%) of standard length]; depth of posterior margin of maxilla [3 to 5% (mean 4%) of standard length] greater than eye diameter [1 to 2% (mean 2%) of standard length]; lip on lower jaw well developed, dentary teeth restricted to dorsal surface; teeth villiform in broad bands on palatines and ectopterygoids; vomerine tooth plate covered with skin and teeth absent. Posterior margin of preopercle serrated. First dorsal fin with VIII spines, all spine bases of similar thickness; second dorsal fin with I spine and 15 or 16 (mode 16; rarely

18, 1 of 40 specimens) soft rays; anal fin with III spines and 11 or 12 (mode 12; rarely 13, 1 of 40 specimens) soft rays, anal-fin base less than second dorsal-fin base; pectoral fin with 15 to 18 (mode 17) rays (all rays unbranched), its length 30 to 35% (mean 32%) of standard length, posterior tip not reaching to, just reaching to or extending slightly beyond level of anal-fin origin; pectoral filaments 7; first pectoral filament shortest, extending beyond level of pelvic-fin origin but not reaching to level of posterior tip of pelvic fin; second pectoral filament extending slightly beyond level of posterior tip of pelvic fin; third pectoral filament reaching near anal-fin origin or extending slightly beyond level of posterior tip of pelvic fin; fourth pectoral filament reaching to or extending slightly beyond level of posterior base of anal fin; fifth pectoral filament extending well beyond caudal-fin base, but not reaching posterior tips of caudal fin, or extending slightly beyond caudal-fin base, not reaching to mid-distal margin of caudal-fin; sixth and seventh [longest, its length 134 to 193% (mean 159%) of standard length] pectoral filaments extending well beyond posterior tips of caudal fin; caudal fin deeply forked, upper and lower caudal-fin lobes not filamentous, upper caudal-fin lobe 35 to 44% (mean 39%) and lower lobe 29 to 42% (mean 36%) of standard length. Pored lateral-line scales 68 to 74 (mode 70); lateral line simple, extending from upper end of gill opening to mid-distal margin of caudal-fin membrane; scale rows above lateral line 6 to 8 (mode 7), below 11 to 14 (mode 12). Gillrakers 11 to 14 (mode 13) on upper limb, 16 to 20 (mode 18) on lower limb, 27 to 33 (mode 31) total. Vertebrae 10 precaudal and 15 caudal; supraneural bones 2. Swimbladder absent. **Colour:** Head and body greyish black dorsally, yellow ventrally; posterior tip of first dorsal fin intense black, other parts yellow; posterior margin and tip of second dorsal fin black, other parts yellow; pelvic fin uniformly yellow; posterior margins of anal and caudal fin translucent, other parts yellow; pectoral fin intense black, except for vivid yellow base; base of pectoral filaments vivid yellow, becoming blackish posteriorly.

Geographical Distribution: Currently known from the lower Mekong River and related rivers (Cambodia and southern Viet Nam), and Kalimantan (Malaysia and Indonesia) (Fig. 147).

Habitat and Biology: No data available.

Size: Maximum standard length at least 20 cm (Motomura and Sabaj, 2002).

Interest to Fisheries: Esteemed as an important food fish at least along the lower Mekong River and related rivers.

Local Names: CAMBODIA: Trey pream loeung; INDONESIA: Kurau.

Literature: Motomura and Sabaj (2002).

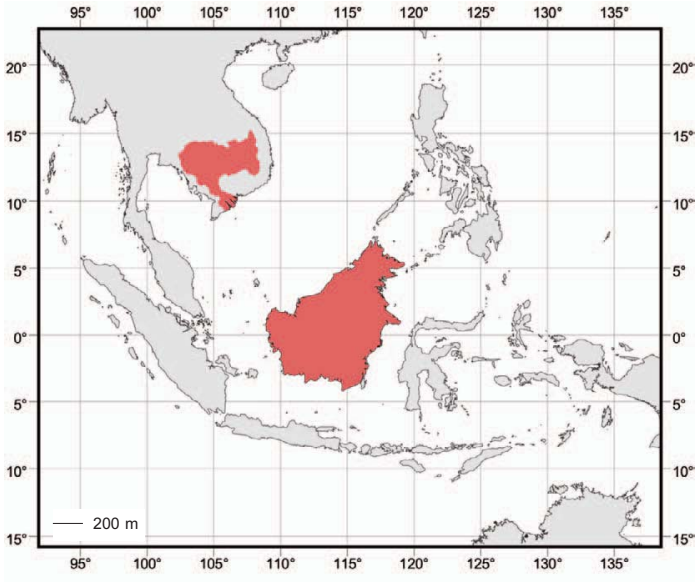

Fig. 147 ***Polynemus melanochir melanochir***
Known distribution

Remarks: The name, ***Polynemus melanochir***, has been used by many researchers [e.g., Bleeker, 1849; Myers, 1936 (as ***Filimanus melanochir***); Gloerfelt-Tarp and Kailola, 1984 (as ***F. melanochir***); Bleeker, 1983 (as ***Trichidion melanochir***)]. However, Feltes (1991) recognized that the polynemid species commonly identified as ***P. melanochir*** (***F. melanochir*** or ***T. melanochir***) was not true ***P. melanochir***, but in fact represented a separate undescribed species (described as ***F. perplexa*** Feltes, 1991).

Although the original description of ***P. melanochir*** was brief, the drawing clearly shows the very black pectoral-fin rays (see Feltes, 1991: fig. 1), such being a characteristic of the specimens considered here as ***P. melanochir melanochir***.

Polynemus borneensis has been regarded as a valid species by many researchers (e.g. Weber and de Beaufort, 1922; Kottelat *et al*., 1993; Rainboth, 1996). However, recent examination of the 3 syntypes of ***P. borneensis***, the neotype of ***P. m. melanochir***, and other specimens showed that they represented a single species (see Motomura and Sabaj, 2002). Therefore, ***P. borneensis*** is regarded as a junior synonym of the latter.

Galeoides microps was described by Steindachner (1869a) on the basis of a single specimen and later described in more detail (Steindachner, 1869b). Although there is no indication in the literature that the holotype of ***G. microps*** has been re-examined since Steindachner's (1869a-b) descriptions (Springer, 1982), the species has been regarded as valid, belonging to the genus ***Galeoides*** (e.g. Fowler, 1935; Myers, 1936; Springer, 1982; Hureau *in* Whitehead *et al*., 1986). Recently, Motomura, Mikschi and Iwatsuki (2001) and Motomura and Sabaj (2002) examined the holotype of ***G. microps*** and regarded it as a junior synonym of ***P. m. melanochir***.

Polynemus melanopus was described by Sauvage (1881) on the basis of 4 specimens from Ho-chi-minh, Viet Nam. The characters, black pectoral fin, vomer without teeth and short snout (5 to 6% of standard length), of the 4 syntypes were found to be consistent with those of the specimens considered here as ***P. m. melanochir*** (see Motomura and Sabaj, 2002). Therefore, ***P. melanopus*** is also regarded as a junior synonym of the latter.

Trichidion hilleri was described by Fowler (1905) on the basis of a single specimen from Baram River, Sarawak, Kalimantan, Malaysia. Although the species has been regarded as valid (as ***Polynemus hilleri***) by many researchers

(e.g. Kottelat *et al.*, 1993; Kottelat and Lim, 1995), examination of the holotype of ***T. hilleri*** and the specimens considered here as ***P. m. melanochir*** showed that they represented a single species (see Motomura and Sabaj, 2002). Therefore, ***T. hilleri*** is also regarded as a junior synonym of the latter.

Polynemus m. melanochir and ***P. m. dulcis*** are uniquely characterized by the absence of vomerine teeth (present in all congeners). Comparisons of ***P. m. melanochir*** with ***P. m. dulcis*** are given in the account of the latter.

Polynemus multifilis Temminck and Schlegel, 1843 — **Fig. 148; Plate VIg**

Polynemus multifilis Temminck and Schlegel, 1843: 29 [type locality: near Banjarmasin, south Kalimantan; holotype (RMNH 436, 136 mm standard length)].

Synonyms: ***Polynemus quatordecimfilis*** Pel, 1851: 10 [type locality: near Banjarmasin, south Kalimantan; objective synonym of ***P. multifilis*** Temminck and Schlegel; holotype (RMNH 436, 136 mm standard length)].

FAO Names: En - Elegant paradise fish; **Fr** - Barbure paradis élégante; **Sp** - Barbudo paraíso elegante.

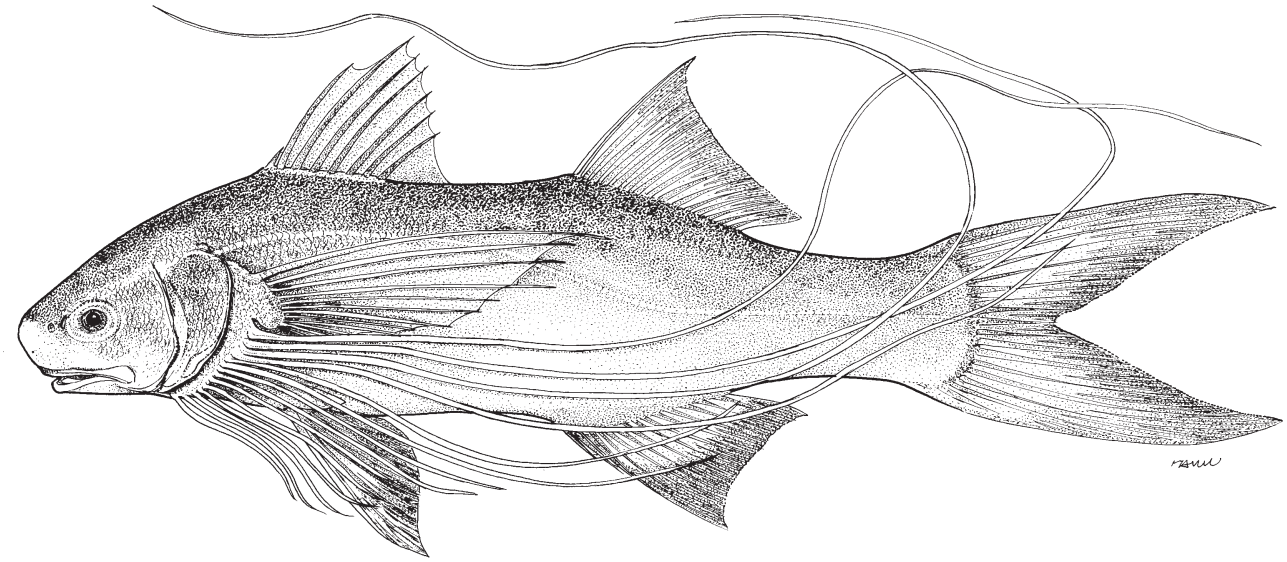

Fig. 148 ***Polynemus multifilis***

Diagnostic Features: A medium-sized species. Body depth at first dorsal-fin origin 23 to 27% (mean 24%) of standard length; head length 23 to 29% (mean 25%) of standard length. Snout pointed; occipital profile nearly straight or slightly protruding. Posterior margin of maxilla extending well beyond level of posterior margin of adipose eyelid; upper-jaw length 9 to 11% (mean 10%) of standard length, approximately equal to caudal-peduncle depth [11 to 12% (mean 11%) of standard length]; depth of posterior margin of maxilla [2 to 3% (mean 2%) of standard length] slightly less than eye diameter [3 to 4% (mean 3%) of standard length]; lip on lower jaw well-developed, dentary teeth restricted to dorsal surface; teeth villiform in broad bands on vomer, palatines and ectopterygoids. Posterior margin of preopercle serrated. First dorsal fin with VIII spines, all spine bases of similar thickness; second dorsal fin with I spine and 14 to 16 (mode 15) soft rays; anal fin with III spines and 11 to 13 (mode 12) soft rays, anal-fin base less than second dorsal-fin base; pectoral fin with 14 to 16 (mode 15) rays (all rays unbranched), its length 33 to 38% (mean 36%) of standard length, posterior tip reaching or extending beyond level of anal-fin origin throughout life; pectoral filaments usually 14 on each side of body, rarely 13 on each side or asymmetrically 13 and 14, or 14 and 15; first pectoral filament shortest, extending beyond level of pelvic-fin origin; second to sixth pectoral filaments not reaching to level of posterior tip of pelvic fin; seventh and eighth pectoral filaments not reaching or extending beyond level of posterior tip of pelvic fin; ninth pectoral filament extending well beyond level of posterior tip of pelvic fin, sometimes extending beyond level of anal-fin origin; tenth pectoral filament extending beyond level of anal-fin origin, rarely extending beyond level of posterior end of anal-fin base; eleventh pectoral filament extending beyond level of posterior end of hypural plate, but not reaching to level of posterior tips of caudal-fin lobes; twelfth to fourteenth (or fifteenth if present) pectoral filaments longer than total length; twelfth pectoral filament probably longest, 182 to 376% (mean 295%) of standard length; caudal fin deeply forked, upper and lower caudal-fin lobes not filamentous, upper caudal-fin lobe 38 to 46% (mean 43%) and lower lobe 32 to 41% (mean 38%) of standard length. Pored lateral-line scales 83 to 99 (mode 86); lateral line simple, extending from upper end of gill opening to mid-distal margin of caudal-fin membrane; scale rows above lateral line 7 or 8 (mode 8), below 14 to 18 (mode 15); caudal-peduncle scales 28 to 37 (mode 32). Gillrakers 9 to 11 (mode 10) on

upper limb, 15 to 17 (mode 16) on lower limb, 24 to 27 (mode 26) total. Vertebrae 10 precaudal and 15 caudal; supraneural bones 2. Swimbladder present. Colour: Head and body dark purplish blue dorsally, silver ventrally; bases of first and second dorsal, anal and caudal fins grayish white, anterior margin of pelvic fin white, remaining parts of those fins semitransparent; pectoral fin semitransparent; pectoral filaments white.

Geographical Distribution: Currently known from the Chao Phraya River system (Thailand), Musi and Batanghari rivers (southeastern Sumatra, Indonesia), and Sampit and Barito rivers (southern Kalimantan, Indonesia). The species is not known from the Kapuas River (where it is replaced by the endemic ***P. kapuasensis***) (Fig. 149).

Habitat and Biology: Occurs on sandy or muddy bottoms in fresh-water rivers. Feeds on crustaceans, small fishes and benthic organisms.

Size: Maximum standard length at least 28 cm (Feltes *in* Carpenter and Niem, 2001).

Interest to Fisheries: Esteemed as a food fish at least along the Chao Phraya River. The species has been often exported to Japan as an aquarium fish.

Local Names: None known.

Literature: Motomura and van Oijen (2003).

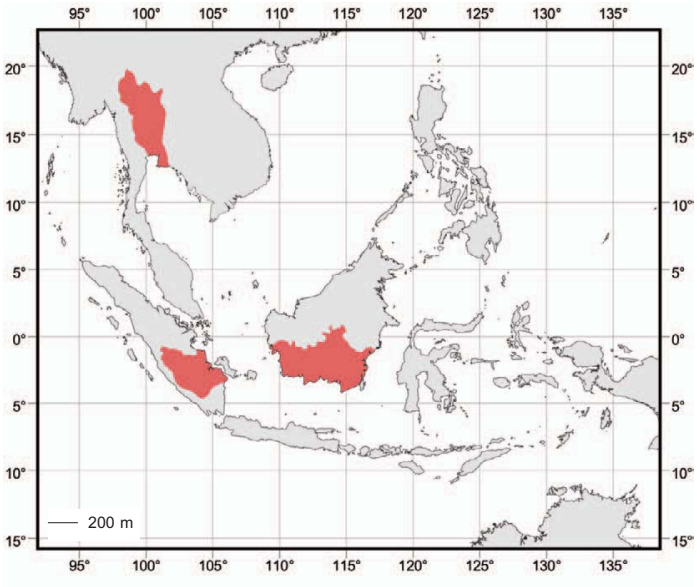

Fig. 149 ***Polynemus multifilis***
Known distribution

Remarks: The name, ***Polynemus multifilis***, first appeared in a footnote of a description of specimens of ***Polynemus plebejus*** Broussonet, 1782 (presently regarded as ***Polydactylus plebeius***) by Temminck and Schlegel (1843). Many researchers (e.g. Myers, 1936; Eschmeyer, 1998; Feltes *in* Carpenter and Niem, 2001) indicated the authorship of ***P. multifilis*** as Schlegel. However, the authorship of the species should be treated as Temminck and Schlegel (see Motomura and van Oijen, 2003). ***Polynemus multifilis*** was originally described on the basis of a single specimen (RMNH 436, 136 mm standard length), and later described in more detail by Schlegel (1852). Pel (1851) described ***P. quatordecimfilis*** as a new species, but ***P. quatordecimfilis*** is a objective synonym of ***P. multifilis*** (see Motomura and van Oijen, 2003). Type material of ***P. multifilis*** and ***P. quatordecimfilis*** were determined by Motomura and van Oijen (2003). Bleeker (1852) described ***Polynemus polydactylus*** as a new species on the basis of a single specimen (RMNH 6001, 133 mm standard length) from Banjarmasin, southern Kalimantan, Indonesia. Because that name was preoccupied by ***P. polydactylus*** of Vahl (1798) which has presently been regarded as a junior synonym of ***Galeoides decadactylus*** (Bloch, 1795), Bleeker's ***P. polydactylus*** is permanently invalid, treated as a primary homonym of Vahl's ***P. polydactylus***. Subsequently, Bleeker (1860) recognized that his ***P. polydactylus*** is the same species as ***P. multifilis*** (his opinion concurred with here).

Polynemus multifilis is easily distinguished from other congeners, except for ***P. kapuasensis***, by having 13 to 15 pectoral filaments (7 in the latter). Comparisons of ***P. multifilis*** with ***P. kapuasensis*** are given in the account of the latter.

Polynemus paradiseus Linnaeus, 1758

Fig. 150; Pl. VIh

Polynemus paradiseus Linnaeus, 1758: 317 [original locality: Bengal, India, based on a figure (see Motomura *et al.*, 2002d: fig. 5) and description of Edwards (1743-1751); type locality: Gariahat, Calcutta, West Bengal, India, based on a neotype (NRM 47529, 198 mm standard length) designated by Motomura *et al.*, 2002b].

Synonyms: ***Polynemus risua*** Hamilton, 1822: 228, 381 (type locality: vicinity of Lukhipur, India; no types known). ***Polynemus toposui*** Hamilton, 1822: 232, 381 (type locality: estuary of Ganges River, West Bengal, India; no types known). ***Polynemus aureus*** Hamilton, 1822: 232, 381 (type locality: Calcutta, West Bengal, India; no types known). ***Polynemus longifilis*** Cuvier *in* Cuvier and Valenciennes, 1829: 365 [type locality: Pondicherry and Ganges River, India; Manila, Philippines (probably erroneous, see Motomura *et al.*, 2002b); 7 syntypes (MHNG 148.24, 134 mm standard length; MNHN 2200, 3 specimens, 141 to 157 mm standard length; MNHN A. 3045, 115 mm standard length; MNHN A. 4803, dried specimen, 154 mm standard length; SMF 439, 124 mm standard length)].

FAO Names: En - Paradise threadfin; **Fr** - Barbure paradis; **Sp** - Barbudo paraíso.

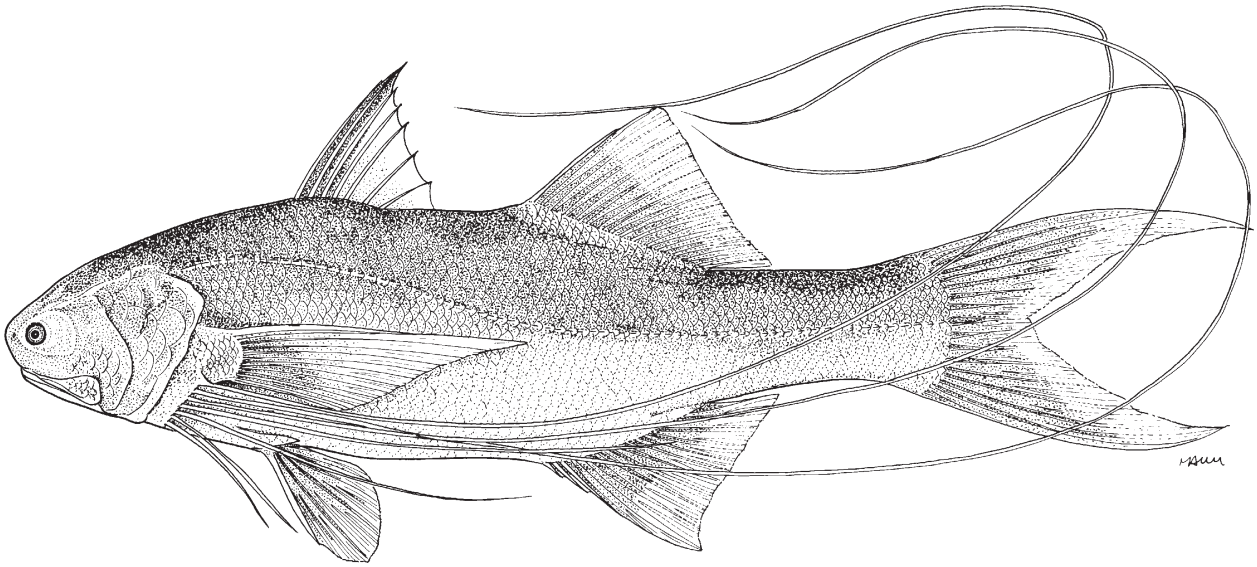

Fig. 150 ***Polynemus paradiseus***

Diagnostic Features: A medium-sized species. Body depth at first dorsal-fin origin 20 to 28% (mean 24%) of standard length; head length 24 to 27% (mean 26%) of standard length. Snout pointed; occipital profile nearly straight. Posterior margin of maxilla extending well beyond level of posterior margin of adipose eyelid; upper-jaw length 13 to 15% (mean 14%) of standard length, greater than caudal-peduncle depth [9 to 12% (mean 10%) of standard length]; depth of posterior margin of maxilla [3 to 4% (mean 4%) of standard length] greater than eye diameter [1 to 2% (mean 2%) of standard length]; lip on lower jaw well developed, dentary teeth restricted to dorsal surface; teeth villiform in broad bands on vomer, palatines and ectopterygoids. Posterior margin of preopercle serrated. First dorsal fin with VII spines, all spine bases of similar thickness; second dorsal fin with I spine and 14 or 15 (mode 15) soft rays; anal fin with II spines and 12 (rarely 11 or 13, 2 of 40 specimens) soft rays, anal-fin base less than second dorsal-fin base; pectoral fin with 15 to 18 (mode 17) rays (all rays unbranched), its length 30 to 35% (mean 33%) of standard length, posterior tip reaching to or just short of level of anal-fin origin [but in juveniles (less than about 100 mm standard length) extending slightly beyond anal-fin origin]; pectoral filaments 7; first pectoral filament shortest, not reaching to level of posterior tip of pelvic fin; second pectoral filament not reaching to or extending slightly beyond level of posterior tip of pelvic fin; third pectoral filament just reaching to or not reaching to level of anal-fin origin; fourth pectoral filament reaching near level of posterior base of anal fin or just reaching to caudal-fin base; fifth to seventh pectoral filaments longer than total length; sixth pectoral filament longest, its length 181 to 248% (mean 208%) of standard length; caudal fin deeply forked, upper and lower caudal-fin lobes not filamentous, upper caudal-fin lobe 39 to 49% (mean 44%) and lower lobe 33 to 47% (mean 40%) of standard length. Pored lateral-line scales 66 to 71 (mode 70); 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 7), below 10 to 12 (mode 11). Gillrakers 12 to 14 (mode 13) on upper limb, 17 to 20 (mode 20) on lower limb, 30 to 34 (mode 32 or 33) total. Vertebrae 10 precaudal and 15 caudal; supraneural bones 2. Swimbladder absent. **Colour:** Head and body greyish black dorsally, yellow ventrally; anterior parts of first and second dorsal fins greyish black, other parts pale yellow; pectoral and pelvic fins uniformly vivid yellow; base of pectoral filaments vivid yellow, becoming whitish yellow on posterior tips; anal fin uniformly yellow; posterior margin of caudal fin yellow, other parts greyish black.

Geographical Distribution: Currently known from the eastern Indian to western Pacific Oceans, where it ranges over continental shelves from western India to Thailand (Fig. 151). Two specimens (ANSP 11498, 135 to 147 mm standard length) collected (probably pre-1900) from Indonesia, lacked detailed locality and other collection data. An Indonesian distribution of the species therefore needs reconfirmation.

Habitat and Biology: Occurs in both estuarine and offshore waters (from depths of less than 27 m), but has been recorded as regularly entering fresh water for breeding purposes (David, 1954). The species feeds on crustaceans, small fishes and benthic organisms.

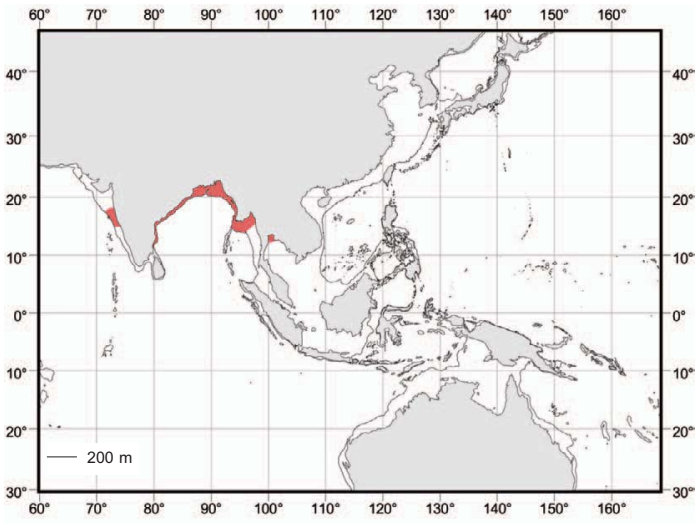

Fig. 151 ***Polynemus paradiseus***
Known distribution

Sexes of the species are separate (no evidence of hermaphroditism; Kagwade, 1970). Mukhopadhyay *et al*. (1995) inferred that males mature at 110 mm total length; females at 120 mm. They suggested that the species spawns from April to September, in the Hooghly River, India, females collected in October being mostly spent.

According to Gupta (1968), who examined ova diameter in Indian examples of the species, the largest diameter of intraovarian eggs was 1.0 mm, the ova diameter in fully matured specimens being over 0.83 mm. However, Jones and Menon (1953), who had collected fertilized eggs of the same species, had earlier recorded a measurement of 0.7 mm in diameter and possession of an oil globule of 0.4 mm in diameter. They also reported a specimen of 170 mm standard length having about 42 000 ova. Gupta (1968) noted that the right gonad was invariably more fecund than the left.

Jones and Menon's (1953) study of the larval history of ***P. paradiseus*** from Indian waters recorded the swimbladder as developing in the larval stage, but atrophying in juveniles. The yolk sac was absorbed by the 4.3 mm stage. With the completion of scale formation and the elongation of the pectoral filaments to adult proportions, the larvae enter the juvenile stage. Body scale rudiments were apparent in juveniles of 13 to 14 mm.

Size: Maximum standard length at least 20 cm (Motomura *et al*., 2002b).

Interest to Fisheries: One of the most important fisheries species for India (especially in West Bengal) and Bangladesh, and Myanmar.

Local Names: BANGLADESH: Tapasi; INDIA: Paradise threadfin; MYANMAR: Nga ponnar; THAILAND: Pla nuad pram.

Literature: Motomura *et al*. (2002d).

Remarks: ***P. paradiseus***, 1 of 3 of the oldest available name for the family Polynemidae, was described on the basis of a figure (reproduced in Motomura *et al*., 2002b: fig. 5) and description given by Edwards (1743-1751), who briefly described the figured fish (collected from Bengal, India by Dr Mead) as the "Mango-Fish." The specimen used for Edwards' figure and description apparently no longer exists. However, Edwards' figure clearly indicates VII spines in the first dorsal fin and 7 pectoral filaments, the uppermost 3 extending beyond the posterior tips of the caudal-fin lobes and fourth pectoral filament not extending beyond the caudal-fin base. The characters of the specimens considered here as ***P. paradiseus*** agree well with those shown on the figure.

Subsequently, Hamilton (1822) described 3 new species with 7 pectoral filaments, ***Polynemus risua***, ***P. toposui*** and ***P. aureus***, all from India. According to their original descriptions (Hamilton, 1822), all 3 species were characterized by having 7 long pectoral filaments and VII first dorsal-fin spines, but differed from each other in the numbers of dorsal-fin soft rays (17 in ***P. risua***, 16 in ***P. toposui*** and 15 in ***P. aureus***), pectoral-fin rays (17, 16 and 17, respectively) and anal-fin rays (including spines; 15, 16 and 14, respectively). However, these fin-ray numbers are almost wholly within the range of intraspecific variation (see Motomura *et al*., 2002b). The diagnostic characters of 7 long pectoral filaments and VII first dorsal-fin spines given in the original descriptions (supported by the collection locality) of these species are consistent with those of ***P. paradiseus***. Accordingly, ***P. risua***, ***P. toposui*** and ***P. aureus*** are regarded as junior synonyms of ***P. paradiseus*** (see Motomura *et al*., 2002b).

Although Fricke (1999) believed ***P. longifilis*** to be a junior synonym of ***Polydactylus plebeius***, which is distributed in the Indo-Pacific, the syntypes of the former clearly differ from examples of the latter, including the neotype, in having 7 pectoral filaments (longer than standard length versus 5, shorter than standard length in the latter) and the orbit diameter smaller than the posterior margin of the maxilla (larger). Examination of the syntypes of ***P. longifilis*** showed them to correspond closely with the specimens considered here as ***P. paradiseus***. Therefore, ***P. longifilis*** is also regarded as a junior synonym of ***P. paradiseus*** (see Motomura *et al*., 2002b).