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ON RECENT ACCESSIONS OF SURINAM FISHES

by

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In 1953, Mr. E. C. Stol, naturalist at Leiden, kindly placed at my disposal a small collection of Surinam freshwater aquarium fishes. A second collection, consisting of freshwater and marine specimens from Surinam, mainly collected by Dr. D. C. Geijskes and Mr. H. W. Lijding (Fishery Department), was received during 1954. As the two collections proved to contain several interesting specimens belonging to species not yet reported from Surinam, the following enumeration is given.

To the measurements of specimens with damaged caudal fins the mark ' is added.

Dasyatis guttata (Bl.; Schn.)

1 ex., near lightship Surinam River, 5-8 miles E., 12 January 1954, H. W. Lijding, 412 mm, ♂.

Further data: length of disc (to anus) 97 mm; length of tail (from anus) 315 mm; width of disc 106 mm; snout (to orbit) 26 mm; floor of mouth with three distinct papillae; skin completely smooth; yolk sac well developed. A well known species from the Surinam coastal area.

Gymnura micrura (Bl.; Schn.)

1 ex., Surinam River (8-10 miles above outlet?), 11 February 1954, H. W. Lijding, 165 mm, ♂.

A common Caribbean species; the type came from Surinam.

Narcine brasiliensis (Olfers)

1 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 123 mm, ♀.

There are distinct dark circular markings on the back. This species is quite common in the Caribbean waters but apparently had not yet been reported from Surinam.

Opisthonema oglinum (Le Sueur)

1 ex., near lightship Surinam River, 5-8 miles E., 2 December 1953, H. W. Lijding, 178 (228) mm.

A well known Caribbean species, hitherto not reported from Surinam.

Ilisha argentata Meek & Hildebrand

1 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 92 (114) mm.

Further data: D 16 (ii. 14, the first unbranched ray very small, less than $\frac{1}{2}$ diameter of eye); A 41; scales in longitudinal series about 39; ventral scutes 18 + 6; gill rakers 12-1-21; depth 2.6 in standard length; eye 2.8 in head; pectorals about 1.4 in head; ventrals small, $\frac{3}{4}$ eye diameter; teeth rather large on jaws, lacking in upper notch; villiform teeth on tongue, palatines, pterygoids, none on vomer; dorsal profile arched, especially below origin of dorsal fin, though in general slightly less curved than ventral outline. First report from Surinam.

Odontognathus mucronatus Lacépède

2 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 123-127 (142-143') mm.

1 ex., seashore near outlet of Nickerie River, 16 September 1953, Dr. D. C. Geijskes, 49 (54') mm.

10 ex., 10 miles above outlet of Surinam River, 10 February 1954, H. W. Lijding, 52-70 (59-80) mm.

The specimens collected by Geijskes were obtained in shrimp-traps, in muddy greyish-brown running water, the ten specimens from Lijding in a trap during ebb-tide. According to Lijding, the present species is known as "sardien" (pronounce "sardeen"). Already reported from Surinam.

Anchoa spinifer (Cuv. & Val.)

3 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 96-116 (117-139) mm.

9 ex., seashore near outlet of Nickerie River, 16 September 1953, Dr. D. C. Geijskes, 29-70 (36-86) mm.

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 56 (69) mm.

Opercles with a small triangular membranous flap; the Surinam River specimens with (15-)16 gill rakers on lower limbs of arches.

The specimens from near the Nickerie River outlet were collected in shrimp-traps, in muddy greyish-brown running water; the small specimen from the Surinam River in a trap during ebb-tide. Already reported from Surinam.

?Anchoviella blackburni Hildebrand

9 ex., seashore near outlet of Nickerie River, 16 September 1953, Dr. D. C. Geijskes, 20-29 (25-37) mm.

The present identification is given with considerable reserve, especially on account of inadequate comparative material and the bad condition of these specimens; moreover, they are all juvenile.

The agreement with the original description by Hildebrand (1943, pp. 129-131) seems very close: D about 13-14; A 25-26; gill rakers on lower limb about 16-17; snout short and blunt; maxillary short, rounded posteriorly; a series of distinct dark spots along base of anal, with some pigment along ventral median line of peduncle and lower parts of caudal fin; idem along base and slightly behind dorsal, sometimes continued to and along upper parts of caudal fin, occasionally also continued before dorsal or (in the other extreme) lacking along dorsal base.

The specimens were collected in shrimp-traps, in muddy greyish-brown running water. Hitherto only known from the Gulf of Venezuela.

Pterengraulis atherinoides (Linnaeus)

3 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 59-68 (73-85) mm.

Collected in a trap during ebb-tide. Fin formula: A 31-35 (iii. 28-32); D 13. Gill rakers on lower limb 12-14. The type came from Surinam.

Lycengraulis grossidens (Agassiz)

4 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 34-46 (43-57) mm.

Collected in a trap during ebb-tide. Fin formula: D 15-16 (iii. 12-13); A 27-28. Gill rakers on lower limb about 17-19.

Occurring from "Venezuela southward, about to Rio de Janeiro, Brazil". Previously reported from Surinam.

?*Lycengraulis batesii* (Günther)

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 32 (41) mm.

Collected in a trap during ebb-tide. The identification of the present specimen remains uncertain on account of the youth of the single example and lack of comparative material.

Although the condition is bad, the following characters can be given: A 26?; gill rakers on lower limb about 14; cheek slightly longer than snout and eye; origin of dorsal nearer to base of caudal than to eye. Further data are given by Hildebrand (1943, p. 148). Not yet recorded from Surinam.

Cetengraulis edentulus (Cuvier)

2 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 111-116 (135-141) mm.

8 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 36-73 (45-91) mm.

The membrane connecting the gill covers across the isthmus is distinct only in the larger specimens. The juvenile specimens have a silvery lateral band, a small triangular opercular flap, D iii. 10-11, A iii. 23-25, gill rakers on lower limb at least 35.

The eight small specimens were collected in a trap during ebb-tide. Reported from Surinam as *Stolephorus surinamensis* Bleeker.

Curimatopsis macrolepis Steind.

172 ex., Surinam, December 1951, E. C. Stol, 19-37 (26-50) mm.

A well known Surinam species.

Curimatella alburna (Müller & Troschel)

3 ex., Surinam, December 1951, E. C. Stol, 39-45 (53-59) mm.

Previously recorded from Surinam.

Pyrrhulina filamentosa Cuv. & Val.

10 ex., Surinam, December 1951, E. C. Stol, 24-53 (32-70) mm.

The type came from Surinam.

Pyrrhulina stoli Boeseman

5 ex., Surinam, December 1951, E. C. Stol, 28-31 (38-42) mm.

Of the short lateral stripe the remains are distinct in only one specimen. Type described from Surinam.

Copeina arnoldi Regan

245 ex., Surinam, December 1951, E. C. Stol, 13-32 (17-45) mm.

Previously reported from Surinam.

Nannostomus marginatus Eigenmann

30 ex., Surinam, December 1951, E. C. Stol, 16-22 (20-27) mm.

Already recorded from Surinam.

Nannostomus beckfordi Günther

785 ex., Surinam, December 1951, E. C. Stol, 20-37 mm (total length).

The name previously used for the present species, *Nannostomus anomalus* Steindachner, seems to be a synonym of *beckfordi* (cf. Hoedeman, 1950, p. 13). Previously reported from Surinam.

Crenuchus spilurus Günther

180 ex., Surinam, December 1951, E. C. Stol, 19-44 (24-53') mm.

Known to occur in Surinam.

Moenkhausia oligolepis (Günther)

1 ex., Gansee, Surinam River, August 1950, H. Heyde, 65 mm (? caudal fin mutilated).

The proximal half of the caudal fin and the median lateral line are dark.

A iii. 22. Recorded from Surinam.

Moenkhausia grandisquamis (Müller & Troschel)

2 ex., Gansee, Surinam River, 31 October 1951, H. Heyde, 69-78 (88'-100) mm.

Previously reported from Surinam.

Moenkhausia chrysargyrea (Günther)

3 ex., Surinam, December 1951, E. C. Stol, 36-40 (48-52) mm.

Reported from Surinam.

Pristella riddlei (Meek)

154 ex., Surinam, December 1951, E. C. Stol, 13-25 (17-31) mm.

Recorded from Surinam.

Hemigrammus unilineatus Gill

20 ex., Surinam, December 1951, E. C. Stol, 19-36 (26-48) mm.

Previously recorded from Surinam.

Hemigrammus rodwayi Durbin

110 ex., Surinam, December 1951, E. C. Stol, 14-30 (18-40) mm.

The squamation in most specimens badly damaged, only few scales on caudal fins left. A 21-24 (iii. 18-21).

Known from Surinam.

Hemigrammus ocellifer Steind.

20 ex., Surinam, December 1951, E. C. Stol, 20-32 (28-44) mm.

Known from Surinam.

Hemigrammus orthus Durbin

104 ex., Surinam, December 1951, E. C. Stol, 17-29 (23-37) mm.

Squamation on caudal fin almost completely lost. A diffuse humeral spot.

A 20-23 (iii. 17-20). Reported from Surinam.

Hemigrammus micropterus Meek

252 ex., Surinam, December 1951, E. C. Stol, 16-37 (22-44') mm.

The sharply defined rhomboid caudal spot generally distinct. Recorded from Surinam.

Hyphessobrycon minor Durbin

140 ex., Surinam, December 1951, E. C. Stol, 14-33 (21-41) mm.

Previously recorded from Surinam.

Cretochanes melanurus (Bloch)

5 ex., Surinam, December 1951, E. C. Stol, 76-86 (91'-105') mm.

The type came from Surinam.

Astyanax (Poecilurichthys) potaroënsis (Eig.)

2 ex., Gansee, Surinam River, 31 October 1951, H. Heyde, 41-42 (53-54) mm.

D 11 (ii. 9, first undivided ray very small); A 28-29, with three or four very small simple rays anteriorly; scales 8-37-7; anal emarginate; a dark band across caudal base, idem along anal margin, dark streaks up and down between muscle segments.

Vernacular name: "foenda wetifisi" (pronounce "foonda wetteefeesee"). Apparently the first report from Surinam.

Carnegiella strigata (Günther)

26 ex., Surinam, December 1951, E. C. Stol, 22-31 (27-39) mm.

These specimens seem to belong to the subspecies *vesca* Fraser-Brunner. A well known Surinam species.

Gasteropelecus sternicla (Linnaeus)

30 ex., Surinam, December 1951, E. C. Stol, 30-43 (40-55) mm.

Several times reported from Surinam.

Pygopristis denticulatus (Cuvier)

1 ex., Surinam, December 1951, E. C. Stol, 52 (66) mm.

D I (procumbent spine). ii. 17; A iii. 31; P ii. 14-15; V i. 6; C 19; abdominal serrae 30 + 4; scales about 90. Previously recorded from Surinam.

Metynnis maculatus (Kner)

3 ex., Surinam, December 1951, E. C. Stol, 59-69 (72-85) mm.

Already recorded from Surinam.

Acestrorhynchus falcatus (Bloch)

5 ex., Surinam, December 1951, E. C. Stol, 102-158 (125-201) mm.

Known from Surinam.

Hoplias malabaricus (Bloch)

1 ex., Surinam River (8-10 miles above outlet?), 11 February 1954, H. W. Lijding, 260 (310) mm.

A common Surinam species.

Gymnotus carapo Linnaeus

8 ex., Surinam, December 1951, E. C. Stol, 55'-107' mm.

Most specimens have the tail mutilated. Teeth anteriorly in 2-3 rows. Several times recorded from Surinam.

Hypopomus beebei Schultz

2 ex., Surinam, December 1951, E. C. Stol, 69'-120' mm.

A about 215 (in larger specimen); rear margin of eye midway between tip of snout and occiput.

Among other recent acquisitions there are two more Surinam examples of the present species:

1 ex., Djai creek, Surinam, 8 October 1948, P. H. Creutzberg, 92 mm.

1 ex., Surinam (Marowini Basin?), autumn 1951, E. C. Stol, 107' mm (tail mutilated).

First record from Surinam.

Platystacus cotylephorus Bloch

1 ex., Surinam River (8-10 miles above outlet?), 11 February 1954, H. W. Lijding, 277 (305) mm.

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 85 (94) mm.

The small specimen has been collected in a trap during ebb-tide. Known to occur in Surinam waters.

Aspredo aspredo (Linnaeus)

1 ex., Nickerie River, outlet, 27 September 1953, Dr. D. C. Geijskes, 142 (152) mm.

A proximal accessory barbel on the maxillary barbel; head 4.05 in length. A discussion on the probable synonymy of *A. aspredo* (Linnaeus) and *A. sicuephorus* Cuv. & Val. has been given by Van der Stigchel (1947, p. 13).

Known from Surinam.

Arius spixi (Agassiz)

2 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 67-74 (85-93) mm.

Previously recorded from Surinam.

Acanthodoras cataphractus (Linnaeus)

17 ex., Surinam, December 1951, E. C. Stol, 58-104 (68-121) mm.

Known to occur in Surinam.

Pseudauchenipterus nodosus (Bloch)

2 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 66-72 (84-91) mm.

Collected in a trap during ebb-tide. Known from Surinam.

Helogenes marmoratus Günther

1 ex., Surinam, December 1951, E. C. Stol, 35 (45) mm.

Previously reported from Surinam.

Callichthys callichthys (Linnaeus)

2 ex., Surinam, December 1951, E. C. Stol, 102-103 (123'-129) mm.

D I. 7 (1); A I. 5-6; scutes $\frac{28-29}{26-27}$; azygous plates 18-19. A well known Surinam species.

Hoplosternum thoracatum (Cuv. & Val.)

3 ex., Surinam, December 1951, E. C. Stol, 64-88 (?-?) mm.

All specimens have the caudal fin damaged. D I. 6 (1) or I. 7 (1); A I. 1. 5 (1); scutes $\frac{(25-)}{23}26$; azygous plates 7-8. Known to occur in Surinam.

Plecostomus plecostomus (Linnaeus)

7 ex., Surinam, December 1951, E. C. Stol, 53-110 (64'-174) mm.

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 36 (49) mm.

Scutes in lateral series 25-26. The small specimen has remarkably rough spinulate ridges on the various plates, the occipital region is covered with rather irregular plates of indistinct shape, both possibly juvenile characters; spots are not discernable and obviously never existed on the belly; D I. 7;

A I. 4; P I. 6; scutes in lateral series 26; teeth $\frac{21}{22}$ on each side. The identity of the juvenile specimen remains slightly uncertain. Already known from Surinam.

Plecostomus watwata (Hancock)

1 ex., Surinam, December 1951, E. C. Stol, 157 (230) mm.

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 115 (178) mm.

1 ex., Surinam River (8-10 miles above outlet?), 11 February 1954, H. W. Lijding, 135 (185') mm.

The first specimen has only 26 scutes in a lateral series, the common number being about 28. The second specimen has been collected in a trap during ebb-tide. Previously reported from Surinam.

Ancistrus gymnorrhynchus Kner

1 ex., Surinam, December 1951, E. C. Stol, 44 (61) mm.

In accordance with Schultz's diagnosis (1944, p. 286), the present specimen has a distinct row of tentacles along the snout, in contradistinction with several descriptions probably made after female specimens (e.g., Eigenmann, 1912, p. 236; Van der Stigchel, 1947, p. 166). These tentacles were also mentioned by Regan (1905, p. 242) in his description of the type of *Xenocara rothschildi* (= *Ancistrus gymnorrhynchus* Kner). The further

characters confirm the present identification. This seems to be the first report from Surinam.

Myrophis punctatus Lütken

1 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 248 mm.

Teeth on vomer in two rows. Two more specimens from the Surinam River near Paramaribo (September 1911, W. C. van Heurn, 60-95 mm) were recently identified. Known from the West Indies, Texas to Brazil. First report from Surinam.

Ophichthys magniocularis (Kaup)

1 ex., near lightship Surinam River, 5-8 miles E., 12 January 1954, H. W. Lijding, 412 mm.

1 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 428 mm.

1 ex., Surinam River (8-10 miles above outlet?), 11 February 1954, H. W. Lijding, 320 mm.

Tail 1.47-1.50 in length; head and trunk 2.0-2.1 in tail; head 3.0-3.1 in head and trunk; cleft of mouth 2.75-3.0 in head; snout 5.0-5.4 in head; eye 2.0-2.2 in snout; pectoral fin 2.25-2.4 in head; dorsal and anal fins with more or less distinct dark margins. Only the proportional size of the cleft of mouth seems distinctly aberrant (cf. Meek & Hildebrand, 1923, p. 157: 2.25 in head). This seems to be the first Surinam record.

Rivulus breviceps Eigenmann

8 ex., Surinam, December 1951, E. C. Stol, 16-26 (21-34) mm.

D 8-9; A 11-12; scales 32-34; predorsal scales 21-24; in several specimens an (ocellated) caudal spot. Previously reported from Surinam.

Rivulus agilae Hoedeman

4 ex., Surinam, December 1951, E. C. Stol, 22-24 (28-31) mm.

D 8; A 11-12; scales 32-35; predorsal scales 22-23. The colour markings of the male specimens are characteristic, the identification of a single female remains uncertain (24 (30) mm). The type came from Surinam.

Micropoecilia parae Eigenmann

3 ex., Surinam, December 1951, E. C. Stol, 11-14 (15-19) mm.

D 6-7; A 8; humeral spot distinct. The single male has the dorsal fin mostly dark, a dark spot on caudal base, upper and lower margins of caudal fin dark, in rather close agreement with Eigenmann's description of the colour markings in *Micropoecilia bifurca* Eigenmann (1912, p. 459, pl. 65 fig. 5). This seems to be the first definite record from Surinam.

Mugil curema Cuv. & Val.

18 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 20-58 (25-75) mm.

2 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 50-77 (66-97) mm.

The two specimens from the Surinam River were collected in a trap during ebb-tide. Known to occur in Surinam waters.

Polydactylus virginicus (Linnaeus)

1 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 80 (107) mm.

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 78 (109) mm.

The second specimen was collected in a trap during ebb-tide. This is a well known Caribbean species, now for the first time recorded from Surinam.

Centropomus undecimalis (Bloch)

1 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 301 (353) mm.

Previously reported from Surinam.

Centropomus ensiferus Poey

2 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 82-93 (108-118) mm.

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 96 (124) mm.

Scales (pores) 48-56; gill rakers on lower limb 17. The second specimen was collected in a trap during ebb-tide. Known to occur in Surinam waters.

Centropomus parallelus Poey

2 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 45-49 (59-62) mm.

Both specimens were collected in a trap during ebb-tide. Previously reported from Surinam.

Oligoplites saliens (Bloch)

1 ex., near lightship Surinam River, 5-8 miles E., 2 December 1953, H. W. Lijding, 66 (80) mm.

1 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 25 (31) mm.

The first specimen (still?) has two rows of teeth anteriorly on the premaxillaries, a juvenile character according to Schultz (1945, p. 331; 1949, p. 127); gill rakers 5-1-17. The second specimen is juvenile; D IV. I. 20; gill rakers on lower limb 19; precumbent dorsal spine free. This seems to be the first exact record for Surinam.

Hemicaranx amblyrhynchus (Cuv. & Val.)

4 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 55-85 (69-113) mm.

All specimens are juvenile; D, A, P, squamation, and dentification as usual; opercles largely dark; a wide dark pigmented marginal band along dorsal and anal fins; ventral fins mostly dark in the two smallest specimens only; head 3-3.5 in length, depending on size. Known to occur from Cape Hatteras to Brazil, only at present recorded for Surinam.

Caranx hippos (Linnaeus)

1 ex., near lightship Surinam River, 5-8 miles E., 12 January 1954, H. W. Lijding, 84 (108) mm.

A common Caribbean species, now recorded for Surinam presumably for the first time.

Selene vomer (Linnaeus)

2 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 50-73 (62-96) mm.

2 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 38-41 (48-52) mm.

All specimens are juvenile; depth in largest example almost 1.65. Known from Maine to Uruguay. First exact report from Surinam.

Genyatremus luteus (Bloch)

1 ex., seashore near outlet Nickerie River, 16 September 1953, Dr. D. C. Geijskes, 21 (27) mm.

1 ex., near lightship Surinam River, 5-8 miles E., 12 January 1954, H. W. Lijding, 144 (179) mm.

2 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 30-33 (39-42) mm.

D XIII. 12 (or XIV. 11); A III. 10-11. Colour markings still distinct on the two small offshore specimens; a distinct dark wedge-shaped saddle before dorsal fin; three saddles below dorsal fin, continued downward as indistinct bands; two indistinct bands on tail; the membranes of dorsal, anal, and ventral fins with dark pigment. First report for Surinam.

Isopisthus parvipinnis (Cuv. & Val.)

2 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 80-88 (103-108) mm.

Known from Cayenne, now for the first time recorded from Surinam.

Macrodon ancylodon (Bl.; Schn.)

2 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 129-145 (165-186) mm.

5 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 100-133 (128-169) mm.

D X. I. 27 (1)-28 (1); A II. 9 (1)-10 (1); gill rakers 3-1-9; scales in longitudinal series about 110, pores about 50. The first five specimens were collected in a trap during ebb-tide. The type came from Surinam.

Cynoscion acoupa (Lacépède)

2 ex., Nickerie River, outlet, 27 September 1953, Dr. D. C. Geijskes, 160-165 (202-210) mm.

D X. I. 18 (1)-20 (1); A I. 8 (1) and II. 9 (1); gill rakers 4-1-9; scales 84-86, pores 54-55; upper canines enlarged; cycloid scales on head; axils hardly dusky. Both specimens were collected in a shrimp-trap. Known to occur in Surinam waters.

Cynoscion virescens (Cuv. & Val.)

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 82 (111) mm.

D X. I. 30; A II. 8; scales about 125; head much depressed; caudal fin lanceolate, possibly a juvenile character (cf. Meek & Hildebrand, 1925, p. 658). Collected in a trap during ebb-tide. Vernacular name according to Lijding: "kanderatikie" (pronounce "canderateekie"). The type came from Surinam.

Plagoscion surinumensis (Bleeker)

1 ex., Surinam River (8-10 miles above outlet?), 11 February 1954, H. W. Lijding, 129 (170) mm.

9 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 72-103 (98-137) mm.

D X. I. 31-33, generally X. I. 32; A II. 6-7; scales in longitudinal series 97-103, pores 48-53; gill rakers on upper limb: 5 (excluding 2 rudiments), 6, 6 (1), 7, or 8; on lower limb: 12 (3-4), 13 (1-3), 14 (1-2), 15 (1-2); number and development of the rudimentary rakers very variable; upper jaw with outer teeth enlarged, lower jaw with inner teeth enlarged; spinous dorsal, caudal, and a marginal band along soft dorsal punctate; axil generally (though sometimes very indistinctly) dusky. Most specimens have one (seldom two) weak spines at preopercular angle.

The nine small specimens were collected in a trap during ebb-tide. The type came from Surinam.

Stellifer stellifer (Bloch)

8 ex., seashore near outlet of Nickerie River, 16 September 1953, Dr. D. C. Geijskes, 30-46 (38.5-63) mm.

4 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 51-57 (69-73') mm.

D XI-XII. I. 19 (1)-21; A II. 8-9; gill rakers 12 (13)-1-(18) 19 (20); pectoral fin 1.2-1.4 in head; inside of opercle with some pigment.

The specimens from the Surinam River were collected in a trap during ebb-tide, those from the Nickerie River in a shrimp-trap in running muddy greyish-brown water. Previously reported from Surinam.

Stellifer rastrifer Jordan (& Eigenmann)

1 ex., seashore near outlet of Nickerie River, 16 September 1953, Dr. D. C. Geijskes, 53 (68) mm.

3 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 81-117 (107-152) mm.

D XI. I. 22-23; A II. 9; gill rakers (15) 16-1-25 (26). The specimen from the neighbourhood of the Nickerie River has been collected in a shrimp-trap in running muddy greyish-brown water. Known from Surinam waters.

Stellifer microps (Steind.)

2 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 46-96 (62-121) mm.

D XI. II. 19 in small specimen; A II. 8; scales in longitudinal series about 50; gill rakers on lower limb 16. Recorded from Surinam.

Nebris microps Cuv. & Val.

1 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 125 (168) mm.

2 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 38-48 (53-72) mm.

The two small specimens still show distinct remains of bands across back and sides. In the larger specimen only indistinct remains on the back could be perceived; D VIII. I. 31 (1); A II. 10 (1). The type came from Surinam.

Micropogon furnieri (Desm.)

1 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 118 (149) mm.

D X. I. 27; A II. 8; scales in longitudinal series about 70; opercular lining largely dark. Previously recorded from Surinam.

Lonchurus lanceolatus (Bloch)

1 ex., Nickerie River, outlet, 27 September 1953, Dr. D. C. Geijskes, 125 (168) mm.

D XI. I. 37; A II. 8. Vernacular name according to Geijskes: "bastaard botrofisi" (pronounce "botrofeese"). Reported from Surinam.

Polycentrus schomburgkii Müller & Troschel

9 ex., Surinam, December 1951, E. C. Stol, 16-46 (20'-59) mm.

1 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 39 (50) mm.

A well known Surinam species.

Nannacara anomala Regan

41 ex., Surinam, December 1951, E. C. Stol, 22-47 (27-66) mm.
Known to occur in Surinam.

Aequidens maronii (Steind.)

2 ex., Surinam, December 1951, E. C. Stol, 39-46 (55-67) mm.
Already recorded from Surinam.

Aequidens vittatus (Heckel)

38 ex., Surinam, December 1951, E. C. Stol, 20-70 (27-100) mm.
Previously reported from Surinam.

Aequidens geayi (Pellegrin)

1 ex., Gansee, Surinam River, August 1950, H. Heyde, 40 (52) mm.
Known to occur in Surinam.

Cichlasoma bimaculatum (Linnaeus)

1 ex., Surinam River (8-10 miles above outlet?), 11 February 1954, H. W. Lijding,
65 (87) mm.
Already known from Surinam.

Apistogramma steindachneri (Regan)

2 ex., Surinam, December 1951, E. C. Stol, 28-33 (36-42) mm.
Previously recorded from Surinam.

Trichinurus lepturus Linnaeus

1 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding,
303 mm.
Known to occur in all tropical and subtropical seas. First report from
Surinam.

Peprilus paru (Linnaeus)

1 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding,
93 (130) mm.
D III. 41; A III. 37. This seems to be the first record from Surinam.

Scomberomorus maculatus (Mitchill)

1 ex., near lightship Surinam River, 5 miles E., 12 January 1954, H. W. Lijding,
216 (284) mm.
Dorsal fin dark to base. First report from Surinam.

Eleotris amblyopsis (Cope)

1 ex., 10 miles above outlet Surinam River, 11 February 1954, H. W. Lijding,
38 (47) mm.
D VI. 9; A 9; scales in longitudinal series 45. Collected in a trap during
ebb-tide. Previously recorded from Surinam.

Gobionellus oceanicus (Pallas)

- 1 ex., Nickerie River, outlet, 27 September 1953, Dr. D. C. Geijskes, 82 (113) mm.
2 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 68-70 (95-98) mm.

The spots still remain, distinct on the largest specimen only. Collected in (shrimp-)traps during ebb-tide. Already known from Surinam.

Gobioides broussonnetii Lacépède

- 2 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 63-131 (71'-175) mm.

D VI. 15-16; A I. 15-16; bars, extending downward and forward on upper part of body, especially distinct in the small specimen. The latter specimen further has the membranous connections between fifth, sixth, and seventh (spinous) dorsal rays damaged and indistinct; the connections between dorsal, caudal, and anal fins are rudimentary and seem partly lacking. The type probably came from Surinam.

Achirus paulistanus Mir. Ribeiro

- 2 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 62-84 (79-106) mm.

- 1 ex., Surinam River (8-10 miles above outlet?), 11 February 1954, H. W. Lijding, 89 (116) mm.

D 54-57; A 41-42; P 0.0 and 1.0; V 5.5 and 5.3; scales rectangular. First record from Surinam.

Achirus gronovii (Günther)

- 1 ex., 10 miles above outlet of Surinam River, 11 February 1953, H. W. Lijding, 44 (59) mm.

D 65; A 50. Collected in a trap during ebb-tide. Already reported from Surinam.

Symphurus plagusia (Bl.; Schn.)

- 2 ex., near lightship Surinam River, 5-8 miles E., 13 July 1953, H. W. Lijding, 124-129 (135-140) mm.

First record for Surinam.

Echeneis naucrates Linnaeus

- 1 ex., near lightship Surinam River, 5-8 miles E., 12 January 1954, H. W. Lijding, 240 (277) mm.

- 1 ex., 10 miles above outlet of Surinam River, 10 February 1954, H. W. Lijding, 167 (196) mm.

The second specimen has been collected in a trap during ebb-tide. This seems to be the first reliable record from Surinam.

Batrachoides surinamensis (Bl.; Schn.)

- 5 ex., offshore before Surinam River, within 7 miles zone, 21 January 1954, H. W. Lijding, 40-59 (47-70) mm.

2 ex., 10 miles above outlet of Surinam River, 11 February 1954, H. W. Lijding, 38-39 (46-47) mm.

With three distinct cross-bars on body. The type came from Surinam.

Ogcocephalus nasutus (Cuv. & Val.)

2 ex., near lightship Surinam River, 5-8 miles E., 13 July 1954, H. W. Lijding, 75-78 (95-101) mm.

Already reported from Surinam as *Malthaea notata* Cuv. & Val.

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