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FISHES OF KINABALU NATIONAL PARK
(NORTH BORNEO)

BY

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During the expedition conducted by H. M. King LÉOPOLD OF BELGIUM in North Borneo (1971), we had opportunity to stay a very few days in Sabah to collect fishes in the streams of Mount Kinabalu National Park.

We wish to express our grateful acknowledgment to Mr David JENKINS, Park Warden of the National Park, and his staff and to Mr Ben STEPHENS, Resident of the West Coast, for their valuable help during the survey and the sojourn in Sabah.

The fishes of that area are well known, especially from the recent works of INGER and CHIN PHUI KONG. It seems however useful to quote the list of the fishes collected, especially as a few of them were previously unknown in the Park.

The fishes were collected with rotenone so that for each prospected station the sample is highly representative of the total fish fauna.

1. Silau Silau stream, tributary of Sungai Liwagu (Sungai Labuk basin) near Kinabalu National Park Headquarters, altitude 5.000 feet, October 7, 1971. Stream covered by thick forest, nearly 2 m wide, with clear water and very swift currents on rocks and stones. Water temperature 16 °C.

Protomyzon whiteheadi (VAILLANT), 48 specimens, total length 18-56 mm, I. R. S. N. B. n° 17537.

Glanioptis hanitschi BOULENGER, 53 specimens, total length 50-84 mm, I. R. S. N. B. n° 17540.

2. Affluent of the Sungai Liodan (Liwagu drainage) below Bundu Tuhan, altitude 4.000 feet, October 7, 1971.

Very steep brooklet, covered by tick forest. Successions of small waterfalls and narrow pools on rocky bottom. Clear water, temperature 16 °C.

Protomyzon whiteheadi (VAILLANT), 4 specimens, total length 18-29 mm, I. R. S. N. B. n° 17538.

Glaniopsis hanitschi BOULENGER, 28 specimens, total length 22-85 mm, I. R. S. N. B. n° 17541.

3. Affluent of Sungai Langanan (Sungai Sugut basin) between Hot Springs and Ranau, altitude 1.700 feet, October 8, 1971.

Torrent, 1 m wide, flowing partly under small trees. Clear water, temperature 18°C.

Puntius binotatus (VALENCIENNES), 1 specimen, total length 50 mm, I. R. S. N. B. n° 17543.

Tor douronensis (VALENCIENNES), 16 specimens, total length 53,5-82,5 mm, I. R. S. N. B. n° 17545.

Paracrossochilus acerus INGER & CHIN, 3 specimens, total length 41-42,5 mm, I. R. S. N. B. n° 17547.

Gastromyzon borneensis GÜNTHER, 2 specimens, total length 59 and 81 mm, I. R. S. N. B. n° 17548.

Glaniopsis hanitschi BOULENGER, 1 specimen, total length 40 mm, I. R. S. N. B. n° 17542.

Protomyzon whiteheadi (VAILLANT), 120 specimens, total length 14,5-48 mm, I. R. S. N. B. n° 17539.

Nemachilus olivaceus BOULENGER, 2 specimens, total length 62 and 69 mm, I. R. S. N. B. n° 17549.

Mystus baramensis (REGAN), 4 specimens, total length 32-37 mm, I. R. S. N. B. n° 17551.

4. Sungai Pangkatan (Liwagu drainage) near Ranau, altitude 2.100 feet, October 8, 1971.

Small stream not covered by forest, about 3-4 m wide, shallow and turbid water flowing slowly over gravel and mud, some deeper pools. Water temperature 21 °C.

Mastacembelus maculatus VALENCIENNES, 3 specimens, total length 67-73 mm, I. R. S. N. B. n° 17559.

Rasbora sumatrana (BLEEKER), 94 specimens, total length 42-78 mm, I. R. S. N. B. n° 17554.

Nematobramis steindachneri POPTA, 5 specimens, total length 35-46,5 mm, I. R. S. N. B. n° 17553.

Puntius binotatus (VALENCIENNES), 1 specimen, total length 30 mm, I. R. S. N. B. n° 17544.

Tor douronensis POPTA, 1 specimen, total length 112 mm, I. R. S. N. B. n° 17546.

Nemachilus olivaceus BOULENGER, 18 specimens, total length 25-35 mm,
I. R. S. N. B. n° 17550.

Mystus baramensis (REGAN), 1 specimen, total length 35 mm, I. R. S. N. B.
n° 17552.

Leiocassis micropogon (BLEEKER), 1 specimen, total length 100 mm,
I. R. S. N. B. n° 17555.

Glyptothorax major (BOULENGER), 1 specimen, total length 101 mm,
I. R. S. N. B. n° 17556.

Glyptothorax platypogon (VALENCIENNES), 1 specimen, total length 61 mm,
I. R. S. N. B. n° 17557.

Tilapia mossambica (PETERS), 35 specimens, total length 43-107 mm,
I. R. S. N. B. n° 17558.

Among these fifteen species, five had not previously been collected at the foothills of Kinabalu : *Nematobramis steindachneri*, *Rasbora sumatrana*, *Leiocassis micropogon*, *Mystus baramensis* and *Glyptothorax platypogon*.

The fishes actually known from the Kinabalu Park may be listed as follows :

MASTACEMBELIDAE :

Mastacembelus maculatus VALENCIENNES.

ANGUILLIDAE :

Anguilla borneensis POPTA.

CYPRINIDAE :

Nematobramis everetti BOULENGER.

Nematobramis steindachneri POPTA.

Rasbora sumatrana (BLEEKER).

Puntius sealei (HERRE).

Puntius binotatus (VALENCIENNES).

Tor douronensis POPTA.

Paracrossochilus acerus INGER & CHIN.

GASTROMYZONTIDAE :

Gastromyzon borneensis GÜNTHER.

Glaniopsis hanitschi BOULENGER.

Parhomaloptera microstoma (BOULENGER).

Protomyzon griswoldi (HORA & JAYARAM).

Protomyzon whiteheadi (VAILLANT).

Protomyzon borneensis HORA & JAYARAM.

COBITIDAE :

Nemachilus olivaceus BOULENGER.

BAGRIDAE :

Mystus baramensis (REGAN).

Leiocassis micropogon (BLEEKER).

SISORIDAE :

Glyptothorax major (BOULENGER).

Glyptothorax platypogon (VALENCIENNES).

ANABANTIDAE :

Anabas testudineus (BLOCH).

CICHLIDAE :

Tilapia mossambica (PETERS).

All the fishes from the slopes of Mount Kinabalu have been collected in the Sungai Labuk and Sungai Sugut drainages, two rivers flowing eastward to the Sulu Sea. It should therefore be very interesting to explore the north and west sides of the Park where the streams drain into the south China Sea (Sungai Tempasuk basin).

Tilapia mossambica was introduced to Sabah about 20 years ago with other foreign fishes for culture in ponds. From the ponds, swamps and dams where the fishes were released they escaped into streams and rivers and are now to be found in natural waters.

Tilapia culture is certainly advantageous for the diet of the people but the introduction of this foreign fish into the natural waters may be very damaging to the local fish fauna.

Being a warm water fish, living in lakes, ponds and slow streams, *Tilapia mossambica* will not spread in the cold and torrential streams of Mount Kinabalu above 4.000 feet. It will maintain itself in the area of water with a temperature of at least 18 to 20 °C, where it can be a competitor of the *Cyprinidae* and *Siluroidea* which have a lower resilience. The evolution of the fish fauna should be periodically checked.

RESUME

Note sur les poissons récoltés au Parc national du Kinabalu (Etat de Sabah, Nord Bornéo) lors d'une courte expédition en 1971, suivie de la liste des espèces ichthyologiques actuellement connues dans cette région.

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