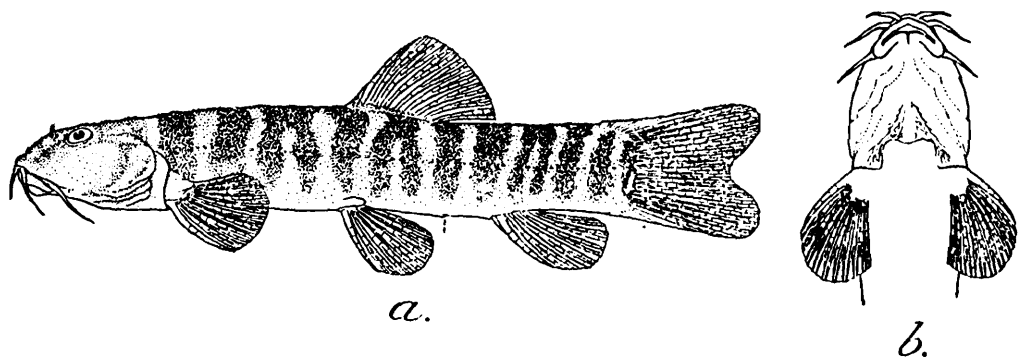


## ON THE SYSTEMATIC POSITION OF THE LOACH, *HOMALOPTERA HINGI* HERRE.

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Early in 1934, Dr. Albert W. Herre sent in exchange to the Zoological Survey of India a valuable collection of Chinese fishes which included, in addition to other forms, three specimens of his species *Homaloptera hingi* (*Lingnan Sci. Journ.* XIII, p. 287, 1934) from Hongkong. Though the species has a greatly depressed form and its paired fins are horizontally placed, a careful examination of the material has convinced me that it is not a species of the genus *Homaloptera*, but must be assigned to the genus *Nemachilus*. In its pectoral fin, there are 10 to 11 rays, of which only one outer ray is simple; the ventral fin has 7 rays, of which only one outer ray is simple. In my recent monograph on the Homalopteridae (*Mem. Ind. Mus.* XII, p. 275, 1932), it was indicated that in *Homaloptera* "the pectoral possesses 14 to 20 rays, of which 4 to 8 outer rays are simple. The ventral is provided with 8 to 10 rays, of which 2 outer rays are simple" In *Protomyzon*, which possesses one simple ray in the paired fins, the number of rays in the pectoral fin is 22. It is thus clear that *Homaloptera hingi* cannot be included either in the Homalopterinae or in the Gastromyzoninae.



*Nemachilus hingi* (Herre).  $\times 1\frac{1}{2}$ .

a. Lateral view; b. Ventral surface of head and anterior part of body.

The colouration of the species, its long barbels and the structure of its lips and jaws also confirm the identification of *Homaloptera hingi* as a species of the genus *Nemachilus*. It appears to be closely allied to *Octonema rotundicauda* Martens (*Monatsber. Ak. Wiss. Berlin*, p. 608, 1868) from Hongkong. In both the species, the nasal flap is produced into a barbel-like process. The caudal fin of *rotundicauda* is stated to be round, whereas that of *hingi* is slightly emarginate with two rounded lobes. In *rotundicauda* the lateral line pierces only a few scales, while in *hingi* it is continued to the base of the caudal fin. The systematic position of *rotundicauda* has been discussed in my monograph referred to above (p. 267).

Several species of *Nemachilus* are found in the torrential streams of India and further east. Some of these, by the modification of their form and by the position and structure of their paired fins, are well adapted for life in swift currents. In this connection reference may be made to a species like *N. shanensis* Hora (*Rec. Ind. Mus.* XXXI, p. 322, pl. xv, figs. 5 and 6, 1929) from Burma. Usually species of *Nemachilus* are found lying among pebbles at the bottom, where their alternate light and dark bands make them inconspicuous. Homalopterid fishes, on the other hand, adhere to rocks and boulders where their uniformly grey or broadly marbled colour harmonises beautifully with the dark background.