B. Width of mouth $\frac{2}{3}$ to $\frac{2}{3}$ the width of head.

1. Occipital process extending $\frac{2}{3}$ of the distance from its base to the origin of dorsal.
   a. Breadth of head $1\frac{1}{2}$ in its length, interorbital width $4$.  

b. Breadth of head $1\frac{1}{2}$ to $1\frac{3}{8}$ in its length, interorbital width $2\frac{3}{8}$ to $3\frac{1}{4}$.
   c. Pectoral spine $\frac{1}{2}$ the length of head; least depth of caudal peduncle $3$ in the length of head  

b. Pectoral spine $\frac{2}{3}$ to $\frac{3}{4}$ the length of head; least depth of caudal peduncle $1\frac{3}{4}$ to $2\frac{1}{2}$ in the length of head.

* Length of snout $2\frac{3}{4}$ to $2\frac{3}{8}$ in the length of head, which is $4\frac{1}{2}$ to $4\frac{1}{3}$ in the length of the fish (in specimens measuring up to 280 mm.)  

** Length of snout $2\frac{4}{5}$ to $3$ in the length of head (in specimens measuring up to 280 mm.)

Breadth of head $1\frac{1}{2}$ in its length, which is $4\frac{3}{8}$ in the length of the fish; least depth of caudal peduncle $1\frac{3}{8}$ in the length of head  

Breadth of head $1\frac{1}{2}$ to $1\frac{3}{8}$ in its length, which is $3\frac{1}{2}$ to $4\frac{3}{8}$ in the length of the fish; least depth of caudal peduncle $2$ to $2\frac{1}{2}$ in the length of head  

2. Occipital process extending $\frac{2}{3}$ of the distance from its base to the origin of dorsal; interorbital width $2\frac{3}{8}$ to $3\frac{3}{4}$ in the length of head.

Maxillary barbel extending to origin of adipose fin; pectoral spine $\frac{2}{3}$ to $\frac{3}{4}$ the length of head  

Maxillary barbel extending to middle of dorsal fin; pectoral spine $\frac{1}{2}$ the length of head  

3. Occipital process extending $\frac{1}{2}$ of the distance from its base to the origin of dorsal; interorbital width $4$ in the length of head.

II. Caudal fin with a moderately deep notch, but the middle rays more than $\frac{1}{3}$ as long as the longest.

A. Occipital process extending $\frac{2}{3}$ of the distance from its base to the origin of dorsal; pectoral spine $\frac{2}{3}$ to $\frac{3}{4}$ the length of head.

Pectoral spine with a finely serrated inner edge and a series of antrore denticulations on the outer edge; maxillary barbel reaching origin of adipose fin (in a specimen of 105 mm.); anal of 10 rays  

Pectoral spine with serrated inner and entire outer edge; maxillary barbel reaching middle of base of dorsal fin (in a specimen of 115 mm.); anal of 13 rays  

B. Occipital process slender, extending $\frac{1}{2}$ of the distance from its base to the origin of dorsal; pectoral spine nearly $\frac{2}{3}$ the length of head; maxillary barbel extending to basal part of pectoral (in specimens measuring up to 190 mm.)  

C. Occipital process short, triangular, extending $\frac{1}{2}$ or $\frac{3}{4}$ of the distance from its base to the origin of dorsal; pectoral spine from less than $\frac{1}{2}$ to nearly $\frac{3}{4}$ the length of head.

1. Humeral process not reaching middle of pectoral spine; length of adipose fin $3\frac{1}{2}$ to $4\frac{1}{2}$ in the length of the fish; anal of 11 or 12 rays. 14. underwoodi.

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