| Character | Notopterus | Monopterus | Mystus | Etroplus | Parambassis | Macrognathus | Sperata | Systomus | Puntius | Garra | Lepidocephalichthys | Hyporhamphus |
|---------------------------------------|------------|------------|----------|----------|-------------|--------------|---------|----------|---------|--------|---------------------|--------------|
| Dorsal fin present | 1 | (|) 1 | 1 | 1 | 1 | 1 | | 1 1 | 1 | 1 | 1 |
| Adipose dorsal fin present | 0 | (|) 1 | L | 0 | 1 | 1 | | 0 | 0 | 0 | 0 |
| Spinous dorsal fin present | 0 | (|) (|) 1 | 1 | 0 | 1 | | 1 1 | C | 0 | 1 |
| Predorsal spines | 0 | (|) (| 0 | 0 | 0 | C | | 0 | C | 0 | 0 |
| Dorsal fin rays | 8 | (| 3 (| 34 | 23 | 0 | 8 | | 7 | 10 | 8 | 16 |
| Pectoral fin present | 1 | (|) 1 | 1 | 1 | 1 | 1 | | 1 1 | 1 | 1 | 1 |
| Pectoral fin rays | 9 | (|) 4 | 1 14 | 18 | 10 | 5 | 1 | 5 9 | 12 | 10 | 17 |
| Ventral fin present | 1 | (|) 1 | 1 | 1 | 1 | 1 | | 1 1 | 1 | 1 | 1 |
| Ventral fin united | 1 | (|) (| 1 | 1 | 0 | 0 | | 0 | 0 | 0 | 0 |
| Ventral fin rays | 58 | (| 0 6 | 10 | 11 | 0 | 5 | 18 | 3 7 | 9 | 7 | 6 |
| Anal fin present | 1 | (|) 1 | 1 | 1 | 1 | 1 | | 1 1 | 1 | 1 | 1 |
| Anal fin rays | 58 | (|) 5 | 28 | 18 | 20 | 13 | 1: | 2 5 | 6 | 9 | 21 |
| Dorsal fin united with caudal fin | 1 | (| 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 0 | 0 |
| Anal fin united with caudal fin | 1 | (|) (| 0 | 0 | 1 | 0 | | 0 | 0 | 0 | 0 |
| Caudal fin round | 0 | (|) (| 0 | 0 | 1 | 0 | | 0 | 0 | 0 | 1 |
| Caudal fin forked | 0 | (|) 1 | . 0 | 1 | 0 | 1 | | 1 1 | 1 | 0 | 0 |
| Caudal fin truncated | | (|) (|) 1 | 0 | 0 | C | (| 0 | C | 1 | 0 |
| Scales present | 1 | (|) (|) 1 | 0 | 0 | C | : | 1 1 | 1 | 0 | 0 |
| Scales on head | 0 | (|) (| 0 | 1 | 0 | C | | 0 | C | 0 | 1 |
| Scales in lateral series | C | (|) (| 38 | 0 | 0 | C | 2: | 28 | 34 | 0 | 1 |
| Barbels present | 0 | (|) 1 | . 0 | 0 | 0 | 1 | (| 0 | 1 | 1 | 0 |
| Number of barbels | 0 | (|) (| 0 | 0 | 0 | 4 | | 0 | 2 | 5 | 0 |
| Body eel like | C | | 1 (| 0 | 0 | 1 | C | (| 0 | C | 0 | 0 |
| Body compressed | 1 | (|) 1 | 1 | 1 | 1 | 1 | | 1 1 | 1 | 1 | 0 |
| Body round | 0 | | 1 (| 0 | 0 | 0 | C | | 0 | 1 | 0 | 1 |
| Dorsal fin in front of ventral fin | | (|) 1 | . 0 | 0 | 0 | 1 | (|) 1 | 1 | 1 | 0 |
| Mouth projecting in beak like process | | (|) (| 0 | 0 | 1 | C | | 0 | C | 0 | 1 |
| Mouth terminal | 1 | (|) 1 | 1 1 | 1 | 0 | 1 | | 1 1 | 1 | 1 | 0 |
| Mouth upwardly projected | 1 | | 1 (| 0 | 1 | 0 | C | (| 0 | C | 0 | 0 |
| Mouth ventrally situated | 0 | | 1 (| 0 | 0 | 1 | C | | 0 | C | 0 | 0 |
| Sucktorial disk present | 0 | (|) (| 0 | 0 | 0 | C | | 0 | 1 | 0 | 0 |
| Adhesive thoracic apparatus present | C | (|) (| 0 | 0 | 0 | C | (| 0 | C | 0 | 0 |
| Eye diameter to head length ratio | 0.2258 | 0.066 | 7 0.3334 | 0.2963 | 0.3158 | 0.1071 | 0.24 | 0.2424 | 1 0.4 | 0.1579 | | 0.1463 |
| Caudal peduncle length to depth ratio | | | 0.3708 | 0.2667 | 2 | 0.3334 | 3.4375 | 0.736 | 3 | 1.666 | 2.1428 | 1.75 |
| Body depth to standard length ratio | 0.2763 | 0.028 | 0.2842 | 0.5555 | 0.4655 | 0.1153 | 0.1334 | 0.443 | 1 0.4 | 0.2068 | 0.1555 | |