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| Thomsonite. | Vivianite. | Wollastonite. |
| Titanite. | Wad. | Wolfenite. |
| Topaz. | Asbolite. | Xenotimite. |
| Pyenite. | Wavellite. | Zaratite. |
| Tourmaline. | Warwickite. | Zincite. |
| Troilite. | Wheelerite. | Zircon. |
| Trona. | Whitneyite. | Zoisite. |
| Turquoise. | Willenite. | Zorgite. |
| Ulexite. | Witherite. | |
| Vermiculite. | Wolframite. | |

DESCRIPTION OF A NEW SPECIES OF HEMIRHAMPHUS (HEMIRHAMPHUS ROSÆ), FROM THE COAST OF CALIFORNIA.

By **DAVID S. JORDAN** and **CHARLES H. GILBERT.**

Hemirhamphus rosæ, sp. nov.

Allied to *Hemirhamphus unifasciatus* and other typical species of the genus.

Body rather elongate, moderately compressed; the greatest depth being one-ninth of the length from the snout to the base of the caudal. Length of the whole head, including the lower jaw, contained $2\frac{2}{3}$ times in the length from tip of lower jaw to base of caudal. Length of the lower jaw beyond the tip of the upper jaw $4\frac{1}{2}$ times in the same length. The length of the head from the tip of the upper jaw is contained $3\frac{1}{2}$ times in the trunk (without head or caudal).

The triangular part of the premaxillaries is convex, slightly carinated above, and about as broad as long. The eye is rather large, somewhat less than the interorbital space, and about half of the postorbital part of the head. Mandible elongate, the narrowed tip slightly bent downward; the bone bordered on each side for its entire length by a conspicuous membrane, the membranaceous part being about as wide as the bony portion itself. Upper surface of mandible convex, grooved. Teeth in both jaws small, even, all of them apparently unicuspid. Top of head nearly plane, very slightly convex. Preorbital rather long; its diameter two-thirds that of the eye.

Scales rather small, very deciduous, about 63 in a longitudinal series.

Fin rays: D. I, 13; A. I, 14.

Dorsal and anal fins not at all scaly; the dorsal a very little longer than the anal and inserted slightly in front of it; the anterior rays of dorsal and anal moderately elevated. Caudal fin moderately forked; the lower lobe the longer; the middle rays nearly twice the diameter of the eye. Pectoral fin a little longer than the postorbital part of the head. Insertion of ventral fin slightly nearer the tip of the caudal fin above than the eye, and midway between the gill-opening and the base of the caudal. Ventrals a little shorter than the postorbital part of the head, not reaching vent.

Color translucent green, with the usual silvery band somewhat broader than a scale. Belly white. A dark vertebral band made of three streaks of dark points. Edges of scales with dark punctulations. Fins plain. Lower jaw dark blood-color; the ground-color red, rendered dark by punctulations. Bordering membrane deep red.

Table of proportional measurements.

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|---|---------------|-------|
| Extreme length from chin to tip of tail..... | 5.75 inches. | |
| Length from tip of upper jaw to base of tail..... | 4.00 inches = | 100 |
| Body: | | |
| Greatest depth | | 11½ |
| Greatest width | | 8 |
| Least depth of tail | | 4½ |
| Length of caudal peduncle | | 6 |
| Head: | | |
| Length from tip of lower jaw..... | | 50 |
| Length from tip of upper jaw..... | | 20 |
| Width of interorbital area..... | | 6 |
| Length of mandible from eye..... | | 36 |
| Length of snout | | 6 |
| Diameter of orbit | | 5 |
| Dorsal: | | |
| Distance from snout..... | | 76 |
| Length of base..... | | 16 |
| Greatest height | | 7 |
| Anal: | | |
| Distance from snout..... | | 78 |
| Length of base..... | | 14 |
| Caudal: | | |
| Length of upper rays | | 13 |
| Length of middle rays | | 11 |
| Length of lower rays | | 14 |
| Pectoral length | | 11½ |
| Ventral: | | |
| Distance from snout..... | | 63 |
| Length | | 7½ |
| Dorsal rays | | I, 13 |
| Anal rays..... | | I, 14 |

This species is abundant in the bay of San Diego and in the harbor of San Pedro. At San Diego we obtained in the winter, a very large number of immature individuals. At Wilmington we secured one specimen nearly adult, and saw numerous others swimming about near the surface in the muddy waters of the harbor.

We have named this species for Miss Rosa Smith, of San Diego, who has given much attention to ichthyology, and to whom the National Museum is indebted for many specimens of San Diego fishes.

SAN DIEGO, CAL., August 10, 1880.