MARINE BIOLOGY

Gold Pigment Controls Vision in Deep Sea Fish

FISH that live in the ocean depths have a different kind of pigment to control vision than do fish at the surface or animals on land. Instead of visual purple, they have a visual gold.

The pigment is reported in Nature (Nov. 10) by Drs. E. J. Denton and F. J. Warren of the Marine Biological Laboratory, Plymouth, England, who found it in four species of deep-see fish caught in the Bay of Biscav.

These species are often caught at a depth of about 500 yards, a depth close to that at which the human eye can no longer see the light of day.

The golden pigments are admirably suited, the scientists comment, to make the best use of the fraction of daylight that penetrates deep into the ocean. These waters are most transparent to blue light, and near the ocean bottom this is the only light penetrating.

Scientists previously had found, in addition to the familiar visual purple, a rose pigment in coastal marine fish. Thus the new golden pigment which has been named chrysopsin, is the third known to scientists.

Science News Letter, November 24, 1956

ASTROPHYSICS—In what state is light from the Crab Nebula? p. 326.

GENERAL SCIENCE—How much money did the Government spend for research and de-velopment during the fiscal year 1956? p. 323.

HEMATOLOGY—Blood groups are linked with what gland disorder? p. 327.

MEDICINE—What is the new cold treatment tested by a southern doctor? p. 329.

PUBLIC HEALTH—How many persons are dying of tuberculosis each year? p. 326.

SURGERY—What kind of lenses give the best protection to the eye against small splinters? p. 329.

Photographs — Cover, Edward J. Bierly — Fish and Wildlife Service; p. 323, Westinghouse Research Laboratories; p. 325, Telefunken; p. 326, U. S. Navy; p. 327, Fremont Davis; p. 336, Bakelite Company.

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—VICTOR W. KILLICK. In Charge of Astronomical Observatory, Sacramento Junior College, Calif.

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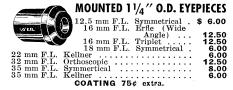


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