

Black Marble Jawfish Mimics the Mimic Octopus

Timid fish observed copying the look of the mimic octopus.

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YouTube screenshot of mimic octopus and black marble jawfish. Video by Godehard Kopp.

Scientists have discovered an interesting case of mimicry in the sea off Indonesia as a mimic octopus (*Thaumoctopus mimicus*) and a black marble jawfish (*Stalix cf. histrio*) have been associating, with the jawfish adopting the look and movement characteristics of the mimic octopus, presumably in an effort to venture further from its home to look for food, according to an article published on PhysOrg. The octopus is a known mimic master itself, having been observed to mimic the look of the flatfish, lionfish, and sea snakes by maneuvering its limbs and copying the movements of these animals to attain the ultimate form of camouflage.

A video shot in Indonesia last summer by Godehard Kopp of the University of Gottingen, Germany captured this unusual pairing, showing the jawfish staying within the tentacles of the mimic octopus as it maneuvered across the sea floor. The jawfish retains the brown and white markings like that of the octopus, making the timid fish virtually indistinguishable from the octopus.

The video was then sent to the California Academy of Sciences where Rich Ross and Dr. Luiz Rocha identified the fish as a black-marble jawfish. They then published their observations in *Coral Reefs*, the Journal of the International Society for Reef Studies, because the interaction between the two species had never been observed before. In their paper, Ross and Rocha describe the black-marble jawfish as a poor swimmer and believe the jawfish mimics the mimic octopus in an attempt to forage for food further away from its den, where it spends nearly its entire adult life. They surmise that mimicking the octopus gives the jawfish a fairly safe way to move about. They say that this interaction is a case of opportunistic mimicry and not obligate mimicry as the mimic octopus is found only in Indo-Malay waters while the black-marble jawfish can be found from Japan to Australia.

Youtube video by Godehard Kopp of the University of Gottingen, Germany.