

Publication

A complex mode of aggressive mimicry in a scale-eating cichlid fish

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 3380046

Author(s) Boileau, Nicolas; Cortesi, Fabio; Egger, Bernd; Muschick, Moritz; Indermaur, Adrian; Theis,

Anya; Büscher, Heinz H.; Salzburger, Walter

Author(s) at UniBasel Salzburger, Walter ;

Year 2015

Title A complex mode of aggressive mimicry in a scale-eating cichlid fish

Journal Biology letters

Volume 11

Number 9

Pages / Article-Number 20150521

Aggressive mimicry is an adaptive tactic of parasitic or predatory species that closely resemble inoffensive models in order to increase fitness via predatory gains. Although similarity of distantly related species is often intuitively implicated with mimicry, the exact mechanisms and evolutionary causes remain elusive in many cases. Here, we report a complex aggressive mimicry strategy in Plecodus straeleni, a scale-eating cichlid fish from Lake Tanganyika, which imitates two other cichlid species. Employing targeted sequencing on ingested scales, we show that P. straeleni does not preferentially parasitize its models but—contrary to prevailing assumptions—targets a variety of co-occurring dissimilar looking fish species. Combined with tests for visual resemblance and visual modelling from a prey perspective, our results suggest that complex interactions among different cichlid species are involved in this mimicry system.

Publisher The Royal Society **ISSN/ISBN** 1744-957X

edoc-URL http://edoc.unibas.ch/40764/

Full Text on edoc No;

Digital Object Identifier DOI 10.1098/rsbl.2015.0521 **PubMed ID** http://www.ncbi.nlm.nih.gov/pubmed/26399975

ISI-Number WOS:000364772300010

Document type (ISI) Article