

(P29) Red tails are effective decoys for avian predatorsJOSABEL BELLIURE¹, BELÉN FRESNILLO¹, JOSÉ JAVIER CUERVO²¹Department of Life Sciences, Ecology Section, University of Alcalá. 28271 Alcalá de Henares, Madrid, Spain.²Department of Evolutionary Ecology, Museo Nacional de Ciencias Naturales (CSIC). C/ José Gutiérrez Abascal 2, 28006 Madrid, Spain.

A possible explanation for the presence of conspicuous colouration in juveniles is the decoy hypothesis, which states that such colouration is present in a non-vital part of the body to divert attacks from head and trunk, thus increasing survival probability. To test this hypothesis we made two different plasticine and plaster lizard models: one with red tails and another with dark-and-light striped tails. We based our models on the colour design of *Acanthodactylus erythrurus* hatchlings, which naturally show a dark-and-light striped dorsal pattern and red tail. Lizard models were placed in the field and also presented to captive *Falco tinnunculus*, a common avian lizard predator. The number of attacks and the body part attacked (tail or rest-of-body) were recorded, as well as the number of days until a model was attacked. Our results suggest that models with both colour designs were recognized as prey and attacked at a similar rate, but in the field, red-tailed models were detected, and thus attacked, sooner than striped-tailed. Despite this increase in conspicuousness, red-tailed models effectively diverted attacks to the tail from the more vulnerable body parts, thus supporting the decoy hypothesis. Greater fitness benefits of attack diversion to the tail compared to the costs of increased conspicuousness would explain the evolution and maintenance of red tail colouration in lizards.

Acanthodactylus erythrurus, attack diversion, predator-prey interaction, evolution of signals.