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Abstracts

SHORT COMMUNICATIONS

EGG DISCRIMINATION IN THE YELLOWHAMMER

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Abstract. In a coevolutionary arms race between a brood parasite and its host, both species evolve adaptations and counteradaptations, such as egg mimicry and egg discrimination. The Yellowhammer (*Emberiza citrinella*) is a minor host of the Common Cuckoo (*Cuculus canorus*) in Europe. We studied egg discrimination in the Yellowhammer in the Czech Republic where it is parasitized only occasionally. To investigate host responses to parasitic eggs, we added either a nonmimetic (blue) or a mimetic (conspecific) egg to 50 nests. The hosts rejected nonmimetic eggs at a higher rate (92%) than mimetic eggs (32%). Neither intraclutch variation nor contrast between mimetic and host eggs had significant effect on rejection behavior. There is no evidence for intraspecific brood parasitism in this species. The ability to reject mimetic eggs has therefore most likely evolved as an adaptation against interspecific brood parasitism and may be the reason why the Yellowhammer is parasitized only occasionally.

Key words: *brood parasitism, cuckoo, egg ejection, egg recognition,* Emberiza citrinella, *Yellowhammer.*