

# The egg recognition and rejection behavior of the vinous-throated parrotbill parasitized by the common cuckoo

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We experimentally parasitized nests of the vinous-throated parrotbill (*Paradoxornis webbianus*) with model common cuckoo (*Cuculus canorus*) and conspecific eggs to investigate egg recognition and rejection behavior toward foreign eggs. The vinous-throated parrotbill has two characteristic color, immaculate blue and white, in central Korea. The common cuckoos laid in the nest of host regardless of host egg color. Although cuckoos eggs laid in white clutches are non-mimicry (2 nests), cuckoo eggs in blue clutches are perfect or good matching (4 nests) in our study area. In blue clutches, the vinous-throated parrotbill rejected 80.0% (20 nests) of the model common cuckoo eggs placed into their nests. Parrotbills rejected 100% (9 nests) of model cuckoo eggs in white clutches. Conspecific eggs with different colors were rejected at a high rate (93%; n=13). These results indicated that the vinous-throated parrotbill has fine discrimination ability of color and egg-color dimorphism favors egg discrimination of parasitic eggs by hosts.