

Plumage aberration observation in House Crow (*Corvus splendens*) in Coimbatore district of Tamil Nadu, India

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ABSTRACT

Plumage anomalies in birds are more prevalent in India, where numerous studies have lately been published. We show an instance of brown plumage aberration in a Common House Crow (*Corvus splendens*) in this report. The plumage of the Common House Crow has been documented in a variety of morphs, the majority of which are examples of leucistic and other aberrations. However, the brown aberration observed by us was unusual and has been discussed.

Keywords: Plumage, brown, aberration, morphs, leucistic

INTRODUCTION

Plumage color anomalies are frequent all over the world and are usually caused by genetic abnormalities (Van Grouw 2013; Mahabal et al. 2015; Van Grouw 2018). Over the last few decades, there have been numerous reports of wild bird plumage aberrations (Sage 1963; Mancini et al. 2010; Frainer et al. 2015; Petry et al. 2017). These color mutations are caused by a lack or excess of certain pigments in the feathers and skin of the birds, resulting in unique color variations that differ from the species' original plumage pattern. The six commonest heritable color aberrations reported are albinism, leucism, melanism, gradual greying, dilution, and brown (Sage 1963; Van Grouw 2006; Van Grouw et al. 2011; Hume & Van Grouw 2014).

Variant Brown mutation is a genetically based plumage abnormality that can be caused by a variety of factors, including autosomal loci and sexual chromosomes.

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It is believed that the brown mutation is triggered by a single gene and that it is inherited recessively through the female sexual chromosome (Van Grouw 2006 & 2012; Petry et al. 2017).

Birds with abnormal plumage have been known to successfully breed and survive in the wild for several years (Forrest & Naveen, 2000). The survival rate of individuals with color aberration is lower than that of those with normal color. This is because predators can detect them more quickly (Owen & Skimmings 1992). Plumage mutations are rather frequent in wild birds and have been documented in a wide range of species like *Oxyura leucocephala* (Dharmakumarsinhji 1975), Albino crows (Khachar 1983; Kale 2006), *Francolinus pondicerianus* (Roy 2010), *Fulica atra* (Parasharya et al. 1996), *Gelasticus thilius*, *Columba maculosa* and *Nothura maculosa* (Urcola 2011), *Uria aalge*, *Uria* spp. and *Morus bassanus* (Van Grouw et al. 2011), *Passer domesticus* (Van Grouw 2012), *Megarynchus pitangua* (Crozariol et al. 2013), *Corvus monedula*, *Pica pica* (Van Grouw 2013), *Ectopistes migratorius* (Hume & Van Grouw 2014), *Corvus splendens* (Mahabal et al. 2015), *Fulmarus glacialis*, *Larus argentatus* (Flood & Van Grouw 2015), *Procellaria aequinoctialis* (Frainer et al. 2015) and *Dendrocopos macei* (Arockianathan et al. 2020).

House Crows (*Corvus splendens*) have established populations in 21 countries outside of their original region, the Indian subcontinent, within the last century,

mostly due to ship-assisted migration (Ryall 2016). The black body plumage of House Crows contrasts with a grey head, nape, and breast sides, making them easily recognizable. They are members of the Passeriformes order and belong to the Corvidae family.

Observations

This paper is the first to document brown plumage aberration in a House Crow (*Corvus splendens*) in Anaikatty of Coimbatore district of Tamil Nadu. We saw and photographed (Plate. 1) an abnormally plumed adult Brown House Crow observed in Anaikatty (11.115435°N, 76.754436°E), Coimbatore district of Tamil Nadu on October 2nd, 2021 at 8:45 AM. It was observed alongside other birds with normal plumage, and the individual was light rustic brown. The bill was black, and it had regular colored eyes. This was a form of brown mutation. Finally, to obtain a good understanding of this phenomenon, researchers should be urged to report all types of color distortion in animals.



Figure 1. Brown Plumage aberration observed in House Crow (*Corvus splendens*)

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Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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