

Record of partial Leucism in Black Drongo (*Dicrurus macrocercus*) from PJTS Agricultural University, Hyderabad (Telangana) India

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ABSTRACT

The bird *Dicrurus macrocercus* shows partial leucism in P.J.T.S.A.U. campus, Hyderabad (Telangana) India. The bird shows white patches on head, the greater coverts in the wings.

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KEY WORDS : Black Drongo Hyderabad, Leucism, Telengana

Introduction

The black drongo (*Dicrurus macrocercus*) is an insectivorous bird belongs to the family Dicruridae. It is a common resident bird found throughout India⁴. This bird prefers wide deciduous forests and cultivated fields². Albinism is a hereditary disorder in which the quantity of melanin pigment produced in a bird's body, feathers and eyes is reduced. Albinism is caused by a mutation in genes that interferes in the expression of the type and concentration of a pigment (*i.e.*, melanin)^{1,3}.

Leucistic individuals have melanin in their bodies, which gives them black eyes and coloured soft parts, but the melanin does not enter the feather structure, therefore their plumage is white. Albinistic individuals do not have melanin in their bodies or plumage. Other recent authors have adopted this "all-or-none" definition of albinism, believing that a bird with any proportion of abnormal white in the plumage but dark eyes is leucistic¹.

Albinism has been reported in birds by various authors^{1,3,5-9,12-14}. Definitions of leucism and other states of albinism are a bit confusing in the ornithological literature. In India several colour mutations have been reported in different bird species by various authors. A worker²⁰ reported the records of albinism in Black Drongo (*Dicrurus macrocercus*) in Amravati district of Maharashtra. This note describes the confirmed record of

partial leucism in *Dicrurus macrocercus* from India.

Material and Method

On 5th February 2020, while conducting the field work at Prof. 5TH55 Professor Jayashankar Telangana State Agriculture University (PJTSAU) (17.320561°N, 78.423921°E), Rajendranagar, Hyderabad (Fig.1), we sighted a small group of *D. macrocercus* which were foraging on insects. During the 15.00 hr to 17.00 hr among the small group of *D. macrocercus* an individual has the peculiar colour pattern on the body which are not commonly seen among the other individuals. The peculiar coloured bird was perched on electric pole, which is located near to the agriculture crops.

Result and Discussion

Our keen observation revealed that an individual has the partial leucistic features like white patches on head, the greater coverts in the wings are with white patches and the other parts of wing are normal. Median, lesser coverts covered with fluffy white hair. The under parts of the bird are white all over. Eyes and beak are normal in colour (Fig.2). In general, a leucistic effect on bird colouration is due to the partial or complete lack of melanin in both plumage and skin¹⁸. Leucism is caused by a genetic mutation, which prevents melanin pigment to rightly deposit on a bird's feathers¹⁸. The noticeable

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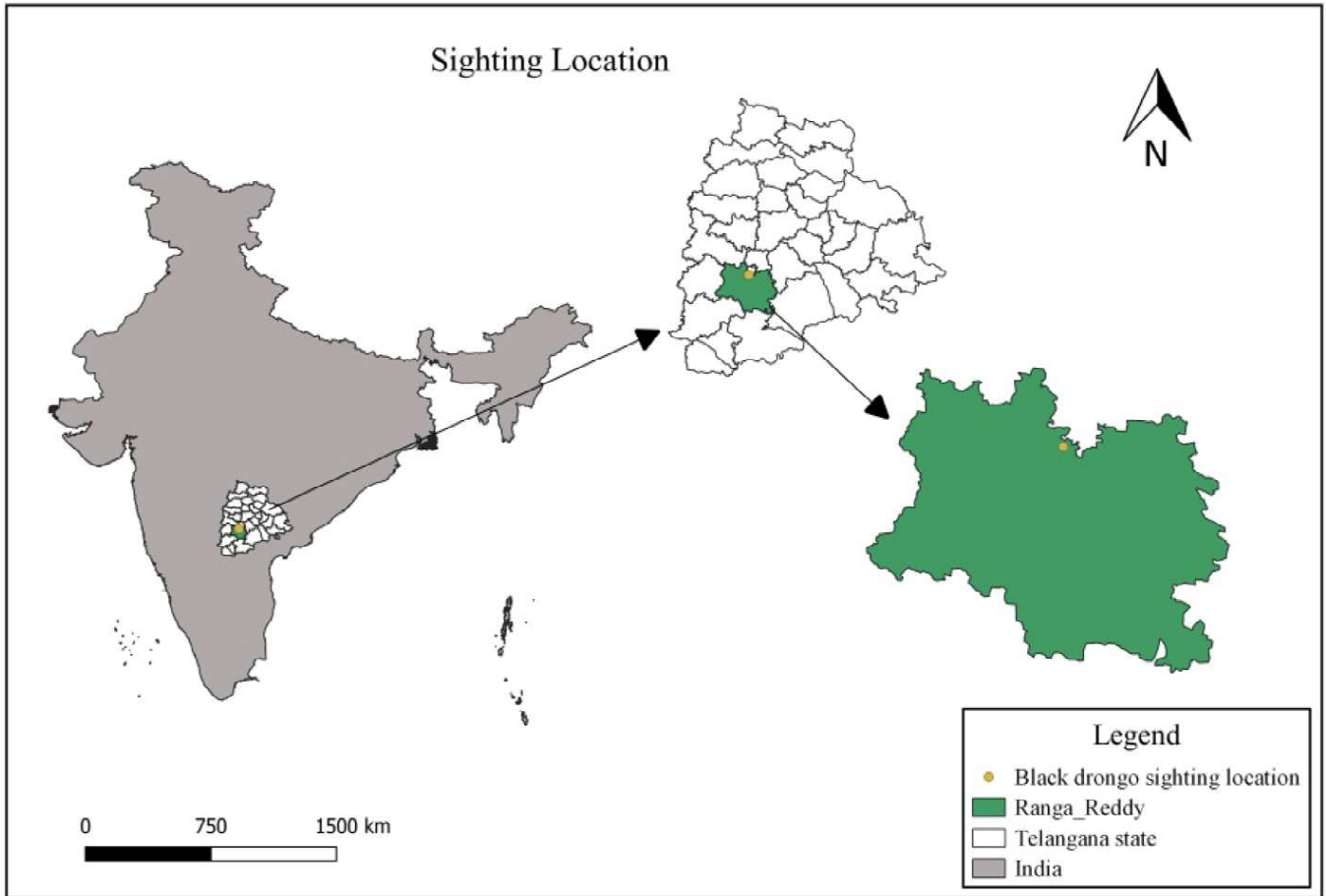


Fig. 1: Partial Lucistic Black Drongo (*Dicrurus macrocercus*) sighted at PJTSAU, Rajendranagar, Hyderabad.

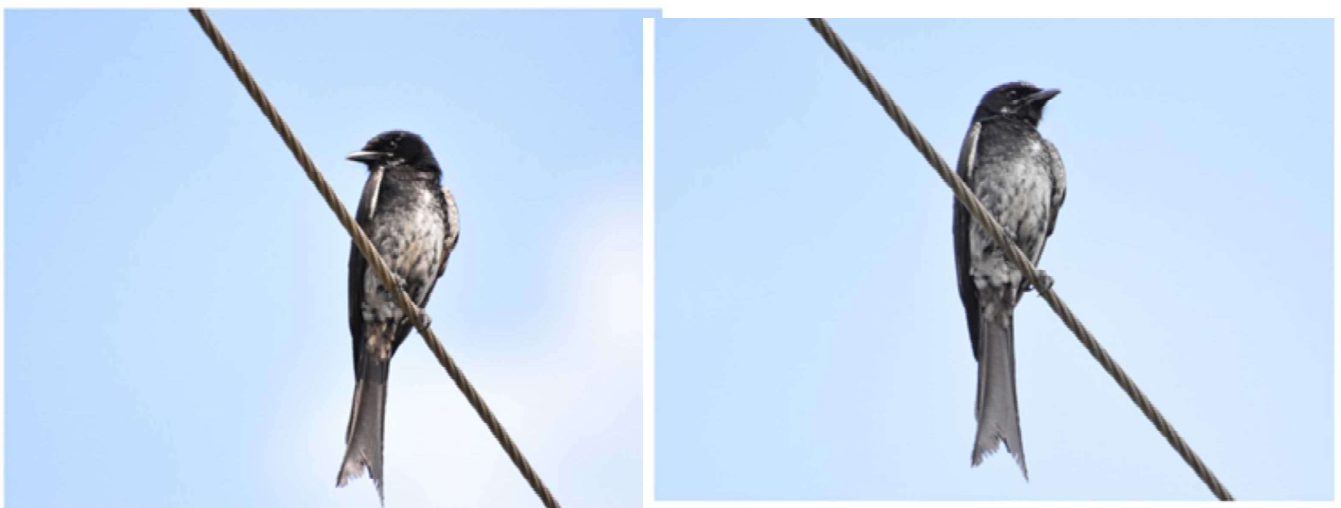


Fig. 2: Partial Lucistic Black Drongo (*Dicrurus macrocercus*)

differences between albinism and leucism are seen in the colour of eyes, feathers and bare parts of a bird. In albinism, feathers are white, eyes are red, bill and feet are pink. Whereas in leucism, white feathers proportion is varied and eyes are normal coloured¹⁸. The leucism in birds is as similar as the vitiligo in the mammals²¹. The

albinism or leucism is also influenced by environmental factors such as diet, living conditions, age, disease and chemical pesticides uses in agricultural fields¹¹. It clearly indicates that, the bird observed during our observation is considered as partial leucism in relative.

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