

# First record of brown plumage aberration in Indian Pied Starling (*Gracupica contra*) from India

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**Abstract** Brown aberration in black plumage is defined by the progressive reduction of eumelanin in birds. The present report describes an observation of plumage with brown aberration in Indian Pied Starling (*Gracupica contra*) from the agricultural landscape of Shokliya village, Rajasthan, India. The observed individual exhibited browning in all the areas of the plumage that are normally black in this species, including the head, wing feathers, and tail feathers. However, feathers with no pigmentation remained white and unaffected. Genetic and dietary factors are thought to be major factors responsible for such aberrations in birds, but more research is needed to determine the exact reasons.

**Keywords:** brown plumage, Asian Pied Starling, Indian Pied Myna, colour aberration, phenotypic variation

**Összefoglalás** A fekete tollazat barna aberrációját az eumelanin fokozott csökkenése okozza a madaraknál. Tanulmányunkban egy barna aberrációval jellemezhető tollazatról adunk ismertetést az indiai Rádzsasztánban, Shokliya falu mezőgazdasági területén megfigyelt szarkaseregélynél (*Gracupica contra*). A megfigyelt egyed a tollazata valamennyi olyan területén barnulást mutatott, amely e fajnál általában fekete, beleértve a fejet, a szárnytollakat és a farktollakat. A pigmentálatlan tollak fehérek maradtak. A tollazat efféle eltéréseiért felelős elsődleges okoknak a genetikai és táplálkozási tényezőket tartják, de a pontos okok meghatározásához további kutatásokra van szükség.

**Kulcsszavak:** barna tollazat, szarkaseregély, színaberráció, fenotípusos változatosság

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## Introduction

Plumage aberrations in birds have long captured the attention of ornithologists and researchers due to their intriguing nature and potential insights into genetic and physiological processes (Hill & McGraw 2006, Guay *et al.* 2012, Price-Waldman & Mary 2021). Numerous instances of such aberrations have been documented in the avian world, e.g. brown, albino, melanistic, ino and leucistic plumage in the House Sparrow (Grouw 2012, Gokulakrishnan *et al.* 2019), leucism in the Greater Coucal (Alby *et al.* 2023) and Copper Smith Barbet (Gayen *et al.* 2022), etc. shedding light on the complex mechanisms governing plumage

development and pigmentation (Sage 1962, Guay *et al.* 2012, Mahabal *et al.* 2015, 2016, Grouw 2021). The prevalence of aberrant plumage, estimated to exceed 1% of total bird populations, underscores the importance of these occurrences (Sage 1963).

Among the diverse array of described plumage aberrations, the phenomenon of brown plumage aberration has gained significant attention. Brown plumage is characterized by a qualitative reduction of eumelanin (Zbyryt *et al.* 2021).

## Notes and Observations

This study reports a new record of brown plumage aberration in the Indian Pied Starling (*Figure 1*). On 16<sup>th</sup> July 2023, an individual with brown aberrant plumage was observed and documented in Shokaliya village (26°12'24.7"N 74°52'22.8"E) of Rajasthan, India. Agriculture is the dominant land use in this area. The Indian Pied Starling, recognized for its predominantly black plumage adorned with distinctive white patches, is aptly named the pied starling (Grimmett *et al.* 2011).



*Figure 1.* Indian Pied Starling (*Gracupica contra*) side profile (left) and in flight (right)  
1. ábra Szarkaseregély (*Gracupica contra*) oldalprofilban (balra) és repülés közben (jobbra)

In this case, the head region (including forehead, crown, malar, nape, supercilium and throat), flight feathers (including primaries and secondaries), and tail region, which are of shiny black colour, exhibited an unprecedented light brown hue, starkly contrasting with the bird's usual appearance. However, the white feathers, which typically exhibit no pigmentation anomalies, remained unaffected, retaining their natural appearance. This observation marks the first recording of a brown plumage aberration in the Indian Pied Starling.

In conclusion, the documented case of brown plumage aberration in the Indian Pied Starling underscores the fascinating variability and complexity of avian plumage abnormalities.

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