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SHORT NOTE



ABERRANT PLUMAGE IN THE WHITE-THROATED PIPING-GUAN (*PIPILE GRAYI* PEZELN, 1870, CRACIDAE)

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ABSTRACT · There is limited information regarding cases of aberrant plumage in Cracidae. Here we present the first record of aberrant plumage in the White-throated Piping-guan (*Pipile grayi*). The individual with aberrant plumage was predominantly white-colored, but with pale cream underparts. Unfeathered body parts like the fleshy wattle, bill, and tarsus had pink color. Based on these characteristics we conclude that it likely constitutes a case of “Ino-light” mutation.

RESUMO · Plumagem aberrante em Jacutinga-de-barbela-branca (*Pipile grayi* Pelzeln, 1870, Cracidae)

Informações referentes a aberrações na coloração de plumagem são limitadas. Nesta comunicação breve apresentamos o primeiro registro de coloração aberrante de plumagem de Jacutinga-de-barbela-branca (*Pipile grayi*). O indivíduo apresentou plumagem com coloração predominantemente branca, com as partes inferiores com coloração creme. Outras partes do corpo, como barbela, bico e tarso apresentaram coloração rosada. Através destas características fenotípicas e utilizando-se de chaves de identificação para mutação de plumagem em aves disponíveis na literatura é suscetível que esta aberração se trate de um caso de mutação “Ino-light”.

KEY WORDS: Color aberration · Cracidae · Pantanal · White-throated Piping-guan · Plumage color

INTRODUCTION

Plumage aberrations are not uncommon in birds, (Guay et al. 2012, van Grouw 2013), and these aberrations can be caused by environmental factors or genetic mutations (Guay et al. 2012). The identification and classification of these aberrations in plumage coloration is often confuse and includes inadequate terms, such as partial albinism (van Grouw 2006, van Grouw 2013). There is limited information regarding cases of aberrant plumage in Cracidae. Here, we present the first record of aberrant plumage in the White-throated Piping-guan (*Pipile grayi*). This species occurs from southwest Brazil to Bolivia, northeast Paraguay and southeast of Peru (del Hoyo et al. 2014). Individuals of the typical morph have mostly black plumage with white spots on wings and head.

OBSERVATIONS

The observation took place on 25 June 2014 in a riparian forest, near the Cuiabá River, northern Pantanal, in the municipality of Corumbá, Mato Grosso do Sul (17°20'S, 56°45'W). An individual *P. grayi* with aberrant plumage color was observed and photographed (Fig. 1A). The individual was part of a group of six other individuals with typical coloration of the species (Fig. 1B). Following our approach, the whole flock flew to a nearby tree, where it was possible to take further photographs. Based on these photographs, the aberrant individual had predominantly white plumage with pale cream underparts. Unfeathered body parts like the fleshy wattle, bill, and tarsus were pink-colored.

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Figure 1. A. Individual of the White-throated Piping-guan (*Pipile grayi*) with aberrant plumage color recorded in a riparian forest in northern Pantanal. B. Three White-throated Piping-guan with typical plumage color. Photographs by Fernando R. Tortato.

DISCUSSION

These phenotypic characteristics are consistent with the “Ino-Light” mutation, proposed by van Grouw (2013). The mutation that produces this aberration causes a strong reduction in the deposition of both types of melanins (eumelanins and pheomelanins) due to incomplete synthesis. The inheritance of Ino is recessive and sex-linked, and therefore this individual is most likely a female (van Grouw 2013). The pale cream color in the feathers removes the possibility of being a case of leucism or albinism. These two mutations represent a partial absence (leucism) or total absence (albinism or leucism) of both melanins in the feathers. (van Grouw 2006, van Grouw 2013).

In a review of variations and aberrations in Cracidae plumage, Teixeira & Sick (1986) report a case of a captive Blue-throated Piping-guan (*Aburria cumanensis*) with ochraceous color on the pileum. Partial albinism records were reported for Speckled Chachalaca (*Ortalis guttata*), Chaco Chachalaca (*Ortalis canicollis*), Rusty-margined Guan (*Penelope superciliaris*), White-browed Guan (*Penelope jacucaca*), Dusky-legged Guan (*Penelope obscura*), and Bare-faced Curassow (*Crax fasciolata*) (Teixeira & Sick 1986). More recently, there was a new record of leucism for an individual of Speckled Chachalaca (*Ortalis guttata*) from southern Brazil (Dupont et al. 2014). We stress that some of these color aberrations may need to be classified according to more up-to-date identification keys (e.g., van Grouw 2013), to avoid inadequate terms, such as partial albinism.

In the region of our record, there have been several studies involving Cracidae with no reported cases of aberrations in plumage coloration (Cintra & Yamashita 1990, Olmos 1998, Antas 2002, Kaestner 2003). Given that *Pipile grayi* is a species of large size (> 1 kg), easy to detect, and dark-colored, we conclude that aberrations in coloration in this species are rare.

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REFERENCES

- Antas, P de TZ (2002) Notas sobre *Penelope ochrogaster* na Reserva Particular do Patrimônio Nacional do SESC - Pantanal, Brasil. *Bulletin of the Cracid Specialist Group* 14: 4–6.
- Cintra, R & C Yamashita (1990) Hábitats, abundância e ocorrência de aves do pantanal de Poconé, Mato Grosso, Brasil. *Papéis Avulsos de Zoologia* 37: 1–21.
- del Hoyo, J, N. Collar, DA Christie, & CJ Sharpe (2014) White-throated Piping-guan (*Pipile grayi*). In del Hoyo, J, A Elliott, J Sargatal, DA Christie, & E de Juana (eds). *Handbook of the birds of the world alive*. Lynx Edicions, Barcelona, Spain. Available at <http://www.hbw.com/node/467086> [Accessed 22 February 2016.]
- Dupont, A, EL Alcayaga, & RA Ramos (2014) Leucismo em *Ortalis guttata squamata* (Galliformes: Cracidae), Município de Santa Cruz do Sul, RS, Brasil. *Caderno de Pesquisa, série Biologia* 26: 6–13.
- Guay, PJ, DA Potvin, & RW Robinson (2012) Aberrations in plumage coloration in birds. *Australian Field Ornithology* 29: 23–30.
- Kaestner, P (2003) An extraordinary aggregation of cracids during the wet-season in the Northern Brazilian Pantanal. *Bulletin of the Cracid Specialist Group* 17: 41–44.
- Olmos, F (1998) The Chestnut-bellied Guan (*Penelope ochrogaster*) in the northern Pantanal of Poconé, Matto Grosso, Brazil. *Bulletin of the Cracid Specialist Group* 6: 6–10.
- Teixeira, DM & H Sick (1986) Plumage variation and plumage aberration in Cracidae. *Brazilian Journal of Biology* 46: 777–779.
- van Grouw, H (2006) Not every white bird is an albino: sense and nonsense about colour aberrations in birds. *Dutch Birding* 28: 79–89.

van Grouw, H (2013) What colour is that bird? The causes and
recognition of common colour aberrations in birds. *British*

Birds 106: 17–29.

