Notes of hypopigmentation in mantled howler monkeys Alouatta palliata (Gray 1849): First documented cases of whole-body leucism from a critically endangered ecosystem in South America

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Abstract

The existence of hypopigmentation such as leucism is the result of inbreeding in isolated populations of wildlife and it is associated with environmental stressors. This anomaly may reduce survival rates. Leucism has been record in wildlife, but overall, it is considered very rare. There have been few records of mantled howler monkeys with leucism in Mexico and Costa Rica, but whole-body leucism in howler monkeys from South America was unknown. In this article, we report for the first-time documented cases of whole-body leucism in young individuals of mantled howler monkeys *Alouatta palliata* in an isolated remanent of tropical dry forest in southwestern Ecuador known as Cerro Blanco Protective Forest. In total, we found two individuals: a juvenile female and a juvenile male in October 2021. We also include a short report about the observation of two seedlings of Dichapetalum (Dichapetalaceae) showing albinism. The report of howler monkeys with whole-body leucism may be caused by the interaction of two processes: inbreeding because of isolated populations and air pollution with sulphur. Thus, immediate management strategies must be considered to significantly increase connectivity with other populations of howler monkeys and reduce air pollution in Guayaquil. Our findings also reveal that hypopigmentation is becoming more frequent in howler monkey´s population along its distributional range. Therefore, we encourage the community to consider a regional management strategy.

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