

**Miller on Ptilosis.**—In a recent paper<sup>1</sup> Mr. Miller presents numerous observations on ptilosis as a supplement to a former paper on the same subject. He discusses first eutaxy and diastataxy showing that many orders are universally diastataxic, including most of the "water birds," Sand Grouse, Parrots, Owls, Goatsuckers and Rollers; while others, including the Struthious and Gallinaceous birds, Cuckoos, etc., Picariae and Passeres are universally Eutaxic. Then there are other groups which contain representatives of both types of feathering, viz: Megapodes, Pigeons, Rails, Limicolae, aberrant Grues, Steganopodes, Kingfishers, Swifts and Hummingbirds.

The presence of the first primary covert and of the remical, or vestigial eleventh primary, are also considered as well as the number of primaries in the various orders, the variation in the alula, outermost primary covert and the number of rectrices.

The oil gland has been carefully studied and several of Gadow's statements as to its presence or absence in various groups are corrected and similar emendations and corrections of statements regarding the presence or absence of the aftershaft are made.

Finally the presence and character of powderdowns is considered and also the presence and character of the natal down, corrections being made to the statements of various authors.

It would seem that entirely too hasty generalizations have been made by previous writers regarding the characters that Mr. Miller has been investigating and his careful and detailed studies have materially altered our supposed knowledge of prevailing conditions in various families and orders. Taxonomists will therefore find it to their advantage to carefully read this important paper before they take for granted the statements of supposedly reliable writers.

Mr. Miller points out some unwarranted generic separations based on supposed differences in ptilosis and there are doubtless others. He considers *Leptolophus* a typical Cockatoo and not the representative of a distinct family, as Mathews and Iredale have regarded it; while the Tiger Herons he thinks should better be left in one genus. On the other hand he finds that *Leucolepis thoracicus* has twelve rectrices as against ten for the other species of the genus and considers that it should stand as a distinct genus for which he proposes the name *Rhinorchilus* (p. 321), while he would divide the genus *Campothera* on the basis of the presence or absence of an oil gland, those species without the gland comprising the genus *Chrysopicos*.

We have only space to mention a few of Mr. Miller's points but his paper is so full of meat that it will have to be read through by those working on similar lines or engaged in classification of the major bird groups.

Another recent paper<sup>2</sup> deals further with the structure of the aftershaft and its value in taxonomy.—W. S.

<sup>1</sup> Further Notes on Ptilosis. By W. DeW. Miller. Bull. American Museum Nat. Hist. Vol. L, Art. V., pp. 305-331, October 31, 1924.

<sup>2</sup> Variations in the Structure of the Aftershaft and their Taxonomic Value. By W. DeW. Miller. American Museum Novitates. No. 140, October 30, 1924, pp. 1-7.