

XVIII.—*Correction of an Important Error affecting the Classification of the Psittacidæ.* By ALFRED R. WALLACE.

A VERY beautiful section of the Parrot tribe inhabits the Moluccas, New Guinea, Australia, and the Pacific Islands, distinguished by the peculiar structure of the tongue, which has the appearance of being covered with a brush. This is not, however, formed by hairs, but by papillæ or fibres, which rise in longitudinal rows on each side of the upper surface of the tongue, and can be opened or expanded on each side of the median line, or depressed in such a manner as to be hardly perceptible. The birds possessing this structure form the subfamily of the *Trichoglossinæ* or “brush-tongued Parroquets,” and are of small or moderate size, of elegant forms, and ornamented with the most brilliant colours—crimson, with blue, purple, and black, or with green and yellow.

I first became acquainted with these birds, so as to examine their peculiarities, in the Aru Islands, where species of *Trichoglossus* and *Chalcopsitta* are found, and afterwards in Amboyna, where the *Eos rubra* is abundant. It was there that I was struck by the remarkable similarity in form, structure of the bill and feet, and texture of the plumage, existing between these and the Lories, several species of which, of the genus *Domicella* of Wagler (namely, *Psittacus domicella*, *P. lory*, and *P. garrulus* of Linnæus), are commonly domesticated in the Moluccas. But the character of the genus *Domicella* is to have a smooth, simple tongue; and on that account these birds, and some others of the genera *Eclectus* and *Psittacodis*, have been formed into the subfamily *Loriinæ* or “true Lories.”

It was not, however, till I reached Gilolo and New Guinea that I had an opportunity of examining any of the above-named species, when what was my surprise to find that both in the *D. garrula*, Wagl., of Gilolo, and in the *D. lory*, Wagl., of New Guinea, the tongue has precisely the same structure as in *Trichoglossus* and *Eos*! At first I could hardly credit my senses; for both species are common alive in Europe. Wagler says of both, “multas vivas vidi;” and also that he has dissected *D. garrula*; yet he says of the genus, “lingua simplex, glabra,” and of the species, “lingua integra.” It was only after examining some dozens of specimens, including two or three that had died in captivity, that I became convinced that the tongue was universally papillate or brush-tipped.

This discovery cleared up a great difficulty—that of the absolute identity in the external form and structure of the Lories and some of the *Trichoglossinæ*, while they were supposed to belong in reality to distinct groups; for an essential structural

difference never exists in animals without making itself visible in external characters, however occasionally masked under a superficial resemblance of form or colour. No character, however, can be given by which, from skins alone, an *Eos* can be distinguished from a *Domicella*, whence much confusion has arisen in locating the species of these groups; and as the internal or structural difference hitherto relied on to separate them does not exist, they must be united in one genus, which had better be that of *Eos*,—first, because that has been correctly characterized and is generally accepted; and secondly, because not only are *Lorius* and *Domicella* synonyms, but are both further objectionable as being founded on old specific names, so that we must either say *Lorius lory* or *Domicella domicella*, or alter the specific name first given to these birds.

The *Trichoglossinæ* will now form a well-marked and highly natural group, characterized by a peculiar compressed form of bill, compact glossy plumage, a brush-tipped tongue, graceful forms, and active habits. They may be called in English, Lories, —a name by which many of the species are known both in Europe and in the Indian Archipelago. The genera *Eclectus* and *Psittacodis*, called here red and green Cockatoos (for even the natives see they have no resemblance to the “Lories”), having smooth tongues, need be no longer separated from the true Parrots, with which they agree in all essential points of structure and habits, while they differ altogether from the species with which they were before so unnaturally associated. *Eclectus*, indeed, is very like some Lories in colour; but this is a superficial resemblance only, the structure of the bill and of the plumage, as well as the general form and habits, being altogether different.

Having discovered in New Guinea another species of *Charmosyna*, much smaller than *C. papuensis*, I am enabled to determine with certainty the claims of that genus to a place among the *Trichoglossinæ*. This subfamily will now include nearly all the brilliantly coloured *Psittacidæ* of the Indian Archipelago, forming a group of birds alike interesting from their singular structure and their extreme beauty.

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#### BIBLIOGRAPHICAL NOTICE.

*The Natural History of the Tineina.* By H. T. STANTON, assisted by Prof. ZELLER, J. W. DOUGLAS, and Prof. FREY. Vol. iii. 8vo. London, Van Voorst, 1858.

WE have already called attention to the appearance of the first two volumes of this important work on the Natural History of the smaller Lepidoptera; and the third volume, which has lately been published, fully maintains the reputation acquired by its predecessors.