

twelve are designated as females and only two as males. I further adduced in favour of my discovery that, taking my six green males and nine red females (from Mafoor) by themselves, it could be mathematically demonstrated that the probability of a really existing sexual difference is as 32700 : 1.

"In my third note (Proc. Zool. Soc. of London, 1877, p. 800, pl. 79) I figured the tail of a specimen in the Dresden Museum, which is half red, half green, and drew attention to some young individuals in several Museums, which are partly green, partly red, proving that the young male is coloured like the female, whereas the well-known savant, Dr. Beccari, wrote that the young ones offer the same differences as the adult birds (Ann. Mus. Civ. Gen. vii. p. 715).

"In my fourth note on the same subject (Orn. Centralblatt, 1878, p. 119) I chiefly showed that Dr. Brehm, who is of opinion (Illustrirtes Thierleben, 2nd ed. vol. iv. p. 68) that the existence of green females and of red males has been proved, was misled by inaccurate statements, and I further drew attention to other facts, which confirm the statement that the young ones of both sexes are red.

"Now, after the lapse of more than four years, I do not hesitate to state that almost every ornithologist admits the fact of the sexual differences in *Electus*, and that all objections and doubts which came from the most different quarters are silenced. The only thing at which I am surprised is, that this sexual difference could have been so long overlooked, red and green *Electi* having even been several times placed in two different genera. On my last visit to London (August of this year), I saw in the bird-galleries of the British Museum a specimen (which has already been a very long time there) labelled as *E. westermanni*, but which is nothing else than a young male of *E. polychlorus* changing from its red dress into its green one, and which has not yet acquired the red spots on the breast; but it is covered all over its back with red spots, the residue of the first dress; the bill, too, proves it to be a young bird. I only ask, How can the existence of such a specimen (green, with red spots) be understood, if not as the result of a sexual difference?

"Apropos of *E. westermanni*, I am still of the opinion which I expressed in 1874, that this is not a good species, but that the specimens known are only individuals which have not acquired their full plumage, in consequence of the unnatural conditions incident to a state of captivity. All the specimens hitherto known, of which I have seen those at Copenhagen, at Bremen, in the British Museum, and at Leiden, are those of birds that lived in captivity. The same remark *perhaps* applies to *E. corneliae*, which is rarer than *E. westermanni*: up to the present time only a few specimens are known. I saw one in Amsterdam and one in London; the latter is labelled as a male—a proof that not only in the tropics can a mistake be made in the determination of a bird's sex. It is not rare that a bird does not acquire its full plumage in captivity; for instance, my friend Hr. von Pelzeln, of Vienna, in the year 1862, published the fact that an *Aquila imperialis* in the Schönbrunn Zoological Gardens retained its immature plumage during seven years.

"I do not share the opinion of Mr. Ramsay, of Sydney (Ibis, 1878, p. 379), 'that the young retain the red and blue state of plumage for a considerable time, after which the *males* assume the green plumage, but think that the change of plumage takes place in *Electus* as quickly as it does in other species of birds. All the red specimens which are young males prove this to be the case by their bills; a young red male never has such a pronounced bill as an adult female. Even the changing specimens which we know (partly red, partly green), still evidently prove themselves by their bills to be young ones.

"Recently Mr. Van Musschenbroek, the well-known Dutch resident at Ternate and Manado, told me that a red *Electus* can now be found in a very isolated locality of the Minahassa, in North Celebes; but he could not tell me which species it is; he meant that they are probably descendants of individuals escaped from captivity. If this is true, a green *Electus* also will be found there, besides *Electus mülleri*, which is a known inhabitant of those regions and is characteristic of Celebes. Another instance of a new immigrating *Electus* in Celebes (although from other reasons) I brought to light in the case of *Electus megalorhynchus* (see Rowley's Orn. Misc. iii., and elsewhere).

"These two last-named species and others not presenting the remarkable sexual differences presented by *Electus polychlorus* and its allies, I venture to question whether they should not be separated generically."

The Plate is intended to represent a fully adult male of *E. polychlorus*, of the natural size. The reduced figures flying in the background illustrate the difference between the two sexes.