

C. variolosus are described, making fifteen in all; while four of *C. merulinus*, two of *C. castaneiventris*, and six of *C. cineraceus* are recognized.

In conjunction with Dr. Stresemann he has published a review¹ of another allied genus, *Chalcites*, in which *C. malayanus salvadorii* (p. 162) is proposed as new, from Babber Island.—W. S.

Figgins on Subspecies.—Mr. J. D. Figgins has recently published three papers of a rather rambling nature but all of them primarily directed against the excessive description of subspecies. In one² he advances the theory that many alleged subspecies are really hybrids. This is by no means a new claim, but as Mr. Figgins merely infers hybridism in nearly all of the cases he cites, and gives little or no definite data, while he seems unacquainted with the vast literature on Mendelian crosses and similar subjects, his arguments hardly command serious consideration.

Another paper³ shows that freshly collected skins of Towhees placed in strong sunlight, bleach in a short time, while those kept in shade do not, and the claim is made that living birds do likewise and that paler races are really only based on faded individuals, but here again there is a lack of precise data or citation of definite cases, and most describers of subspecies take this matter into consideration, while those cases in which fading has been mistaken for subspecific variation have been largely if not entirely eliminated from our lists. The demand for breeding specimens has not been, as Mr. Figgins infers, to show the greatest difference between races, but to show the true (breeding) distribution of the form, and fresh plumaged autumn individuals of most subspecies are just as easily distinguished as are breeding birds if not more so. The claim that Mr. Beebe's very limited experiments eliminate all question of the influence of "meteorological elements" on living birds is rather unfortunate, as Mr. Figgins seems quite unacquainted with the far reaching and extended work of Prof. Sumner on this problem which has brought quite opposite results. Likewise, the references to Hollister's claim that captivity affects the bony structure of lions, causing differences as great as those claimed as subspecific in wild animals, is unfortunate in the face of more recent investigation which shows the condition of the captive animals to be due to disease.

In his third paper⁴ the A. O. U. Committee seems to be Mr. Figgins' target and while this long suffering body has long since refrained from any sort of defence, a few words as to its attitude on subspecies may not be amiss, as many others are no better informed than Mr. Figgins on the subject.

¹ Ueber die Indoaustralischen Glanzkuckucke (*Chalcites*) von Ernst Hartert und Erwin Stresemann, *ibid.* pp. 158-163.

² Some Observations Relative to Hybrids and Intergradation. By J. D. Figgins. *Proc. of the Colorado Museum of Nat. Hist.* V, No. 1, June, 1925, pp. 1-12.

³ Some Observations Relative to Meteorological Influences. By J. D. Figgins. *ibid.*, V, No. 2, pp. 13-22. July 20, 1925.

⁴ Twice-told Tales. By J. D. Figgins. *ibid.*, No. 3, October 5, 1925, pp. 23-32.

Subspecies are really only one of the many questions that the committee has before it, and in the opinion of the writer one of the minor questions. While in the old days it was possible for the committee to "pass" on all proposed new species and subspecies, with the modern refinement in distinctions this is quite impossible. The committee is composed of busy men who cannot often come together and who cannot gain access to all the material necessary, even if they had the time to study it, and it would be foolish to pass snap judgment on the careful work of specialists. Such action would demand no consideration or respect. It is the writer's opinion that, after eliminating such alleged subspecies as are obviously based on seasonal, sexual or other such differences, all others to which no objection has been raised should be placed in the 'Check-List' to stand or fall as subsequent investigation may decide. No check-list is the last word on the subject. It is merely the present systematic aspect of the science, and the number of subspecies accepted is purely a matter of individual opinion.

The reviewer has no more personal use for subspecies separated on minute characters than has Mr. Figgins, because they do not happen to concern the work in which he is most interested, but that is no reason why he should object to others describing them or using them in their work, nor does it give him any warrant to doubt the accuracy of their work. Neither is he interested in the minute and detailed nomenclature of the muscles nor is he able to distinguish them but he realizes that others can do this and reach important results from their anatomical study. Why this rather general clamor against subspecies on the part of field ornithologists, collectors, oölogists, etc., it is hard to understand. If subspecies do not pertain to their work why bother with them? Let them be satisfied with the species but do not try to hamper the work of those who can and do make use of them for the advancement of scientific knowledge.—W. S.

Gardner on Modification and Taxonomic Value of the Tongue in Birds.—Lt. Gardner¹ takes up the study of the bird's tongue about where Lucas left it in 1896, and goes much more thoroughly into the matter, having been fortunate in securing a much wider range of material upon which to base his work.

Generally speaking he finds that this organ is, as has been considered by others, extremely variable and obviously correlated directly with the character of food upon which the bird depends. Where the food habits of a family or order is the same throughout, we naturally find that the structure of the tongue is similar in all species of the group and becomes a group character. Its taxonomic value, however, seems to be very slight, since, from similarity of food or convergent evolution, resemblances in tongue structure will be found where no true relationship between the birds exists.

¹The Adaptive Modifications and the Taxonomic Value of the Tongue in Birds. By Leon L. Gardner. Proc. U. S. Nat. Mus., Vol. 67, Art. 19, pp. 1-49. 1925.