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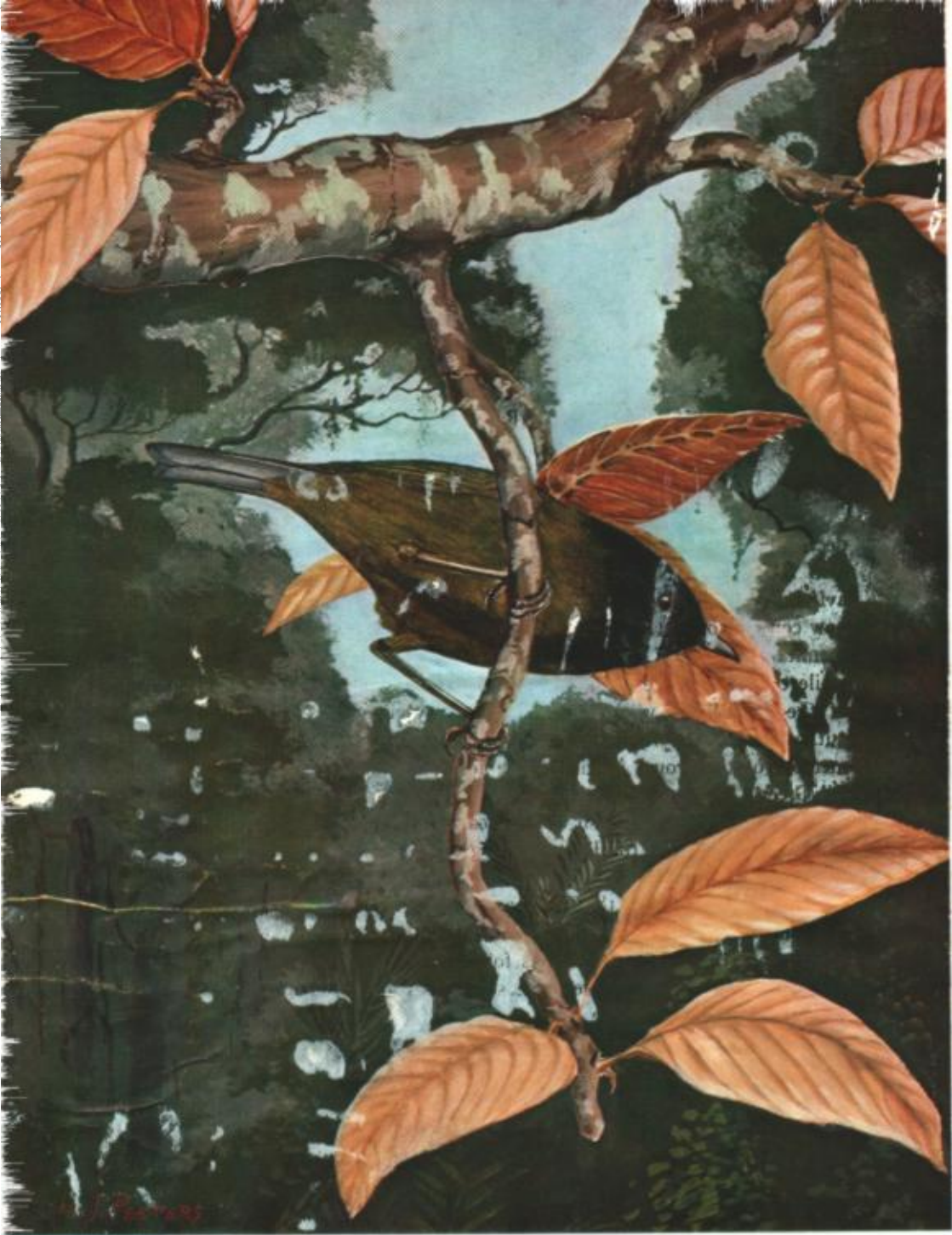
No. 1

A NEW SPECIES OF WARBLER FROM NEW GUINEA

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THE birds of New Guinea have become better known with each passing decade through continuation of field exploration, especially by the American Museum of Natural History. Nevertheless, the rich and complex avifauna of this island evidently still contains a few species that are just now coming to light. It was my good fortune to find one of these in the mountain forests of the Watut River drainage of eastern New Guinea while collecting there in October of 1962. The new species is a member of the Old World warbler complex, the Sylviinae (Sylviidae of many authors), and in style of coloration is not approached by any other known member of the group, its distinctive feature being extension of Olive to Oil Green (Ridgway, 1912) over most of the body, these colors being relieved only by dull blackish of the head, throat, and central belly. The species entirely lacks the light yellow-green and whitish areas that occur on the ventral surfaces of most sylviines.

The generic groups in the Sylviinae are notoriously ill-defined and grade into one another. Ticehurst (1938: 3) in his monograph on the genus *Phylloscopus* comments on this as follows: "The characters which divide up the family . . . into genera are small ones and often only matters of degree. Thus genera have been constituted on such characters as proportionate size of bill, proportionate length of, or shape of, the tail, size of the rectal bristles or of the first [tenth] primary, etc.—none of them very clear-cut characters, and intergrading is common. And so it seems to me quite impossible to make watertight definitions . . ." Meise (1951: 318) in his review of the genus *Gerygone* of the Indo-Australian region points out that *Gerygone* is distinguished from *Sericornis* by a relatively long second [ninth] primary, less laterally compressed bill, and relatively shorter leg and weak toes. But he goes on to say that there are no absolute distinguishing features and that there are transitional species between the genera.



Sericornis nigroviridis Miller
From a painting by Hans J. Peeters

Sericornis and *Gerygone* are the principal groupings of tree warblers in New Guinea (Mayr, 1941). In structural details of bill, feet, wing and tail feathers, and wing shape, I can find in the new warbler no departures from *Sericornis* sufficient to establish a new genus even though its style of coloration departs radically from other species usually associated in that genus and from the species of *Gerygone*. Still the coloration is no more divergent than is that by which *Gerygone palpebrosa* differs in color pattern from other members of its genus. The new species is thus a very distinctively colored type among the Sylviinae but with at most only minor structural features to distinguish it. I think that nothing would be gained by giving it separate generic standing, and to set up for it a new monotypic genus in this already overly subdivided subfamily would tend to obscure its affinities and be a disservice to systematics. Were there a cluster of species obviously centered about the new form, the argument could be advanced for a generic label of convenience despite difficulties of definition, but this is not the case.

The characters mentioned by Meise (1931: 318) as generally separating *Sericornis* and *Gerygone* have been checked in the new species and in all these respects it falls with *Sericornis*. The ninth primary in the new species is relatively short, being 10 mm shorter than the wing tip. The bill is laterally compressed, rather more extremely so than in *Sericornis* generally, and thus is unlike *Gerygone*. The feet are relatively heavy, corresponding closely with those of *Sericornis rufescens*. The species may therefore be designated as

***Sericornis nigroviridis* new species**

Type.—Adult male, no. 149180 Mus. Vert. Zool., taken at Edie Creek, elevation 7,000 feet, west of Wau, Morobe District, Territory of New Guinea, on 18 October 1962, by A. H. Miller; testis 7 mm long, skull typical of adult (fully granulated); original no. 12068.

Diagnosis.—Differs from other members of the genus *Sericornis* in Olive to Cerro Green (Ridgway, 1912; see also plate 22, L 5 of Maerz and Paul, 1950) of underparts, this color extending to lower flanks and under tail coverts, and in black to sooty gray throat, breast, and central belly which grades into dark green areas. Bill more laterally compressed, the rami of the mandible more nearly parallel, and the gonys somewhat keeled. Crown blackish green (plate 24, L 1-2, Maerz and Paul, 1950), the back, rump, and external margins of wing coverts, remiges and rectrices somewhat brighter or lighter green (Oil Green, Ridgway, 1912; plate 21, L 5, Maerz and Paul, 1950). Wing and tail feathers dull black to sooty gray with no light markings or windows. Feet and bill entirely black.

Description.—In addition to the diagnostic features, the following char-

acteristics should be noted. The sides of the head and the ocular area are blackish like the throat; thus there is no trace of an eye ring or eye stripe. The rictal bristles, which are about half the length of the bill, in number and size are the same as in *Sericornis rufescens*. There is a slight gray tipping to the black feathers of the chin. The tail feathers are pointed, the inner vanes being angled at the end as in *Sericornis rufescens* and others of the genus. The ventral surfaces of the shafts of the rectrices are whitish. In details of scalation of the tarsus and feet I can find no significant departures in *S. nigroviridis* from that in *S. rufescens*, although the latter has a greater development of a plantar flange distally on the tarsus.

Unfortunately, no specific notation was made of eye color as the bird was being prepared, for the significance of the specimen was not then appreciated. On the other hand, if the iris had been other than dark, I would almost certainly have noted this fact.

Measurements of the type are: wing (chord), 56.5 mm; tail, 40.8; exposed culmen, 8.9; bill depth at nostril, 3.3; tarsus, 19.5; middle toe without claw, 9.7; hind toe without claw, 6.7.

DISCUSSION

The single and only known specimen of this new warbler (Figure 1, piece) was obtained in second-growth, cloud-swept woods bordering a trail. Here it was seen working in or near the crown foliage about 25 feet (8 meters) from the ground. A light rain was falling in the midafternoon period when it was encountered and it and other birds were then silent and relatively inactive. Another warbler, *Phylloscopus trivirgatus*, was taken in the same group of trees at this time. This locality was searched briefly on three subsequent occasions without encountering either species again.

The fact that the bird had a fully granulated skull typical of adult passerines and a testis of what may be assumed to be maximum size for birds of this group indicates that it was adult and stationed for breeding. The bill was somewhat damaged by shot, but no part was torn away. However, the fracturing of the bill near the nostril may have led to a lateral compression that in its degree is unnatural. Still the breakage is judged not to account for all the slenderness of the bill and particularly not that of the mandible.

Because the knowledge of this new species must for now rest on a single specimen, especial care was taken to compare samples of all species of sylviines to detect if possible any plumage stages or other variations that might in any way approach this bird or suggest a modification or a hybridization arising from some other species group. The fact that no ap-

proach, even remote, to its coloration could be found seems to justify a formal nomenclatural proposal at this time.

Inasmuch as family and subfamily limits are not satisfactory in the inclusive muscicapid complex (Mayr, 1941: 106), of which the sylviniines are part, nor indeed in other somewhat similar passerine families, a search was made for aberrant members of other groups that might significantly approach this novelty. Thus all muscicapids in the inclusive sense of Mayr (turidines, timaliines, etc.), dicaeids, and smaller meliphagids were checked over in the sample series of the American Museum of Natural History. Somewhat similarly colored green and black species were scrutinized particularly, for example the honeyeaters of the genus *Myzomela*, the timaliine *Androphobus viridis*, and the aberrant dicaeid *Rhamphocharis crassirostris*. In none of these is the bill and foot structure at all close to that in *Sericornis nigroviridis*. *Androphobus viridis*, as a case in point, has a much more rounded wing, long and loosely structured tail feathers, and a deeper bill basally; also, it is much larger in general.

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