

**Pterylosis of the Wing and Tail in the Noisy Scrub-Bird,
Atrichornis clamosus, and
Superb Lyrebird, *Menura novaehollandiae*
(Passeriformes: Atrichornithidae and Menuridae)**

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ABSTRACT. The wing and tail pterylosis of *Atrichornis clamosus* and *Menura novaehollandiae* were studied. On comparing the wing pterylosis, a great difference was found in the number of the remiges and coverts, especially those in the forearm. In comparison with *Ploceus nigerrimus* (Morlion, 1971), chosen as a representative passerine, we saw that in wing pterylosis *Atrichornis* is much nearer to the Passeres than is *Menura*.

In the tail pterylosis, a great difference also exists between the two species investigated: not only in the aspect of the feathers, but also in the number of rectrices, greater upper and under tail coverts and in the presence or absence of the first pair of upper and under tail coverts. In contrast to the wing pterylosis, however, the tail pterylosis of *Atrichornis* is markedly different from *Ploceus nigerrimus*.

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KEYWORDS: comparative morphology, pterylosis, Atrichornithidae, Menuridae, Aves.

The wing and tail pterylosis of *Atrichornis clamosus* and *Menura novaehollandiae* were investigated using the clipping method (Morlion, 1971). Because the tips of the remiges and rectrices of the *Menura* specimen were worn, only the measurements of the wing and tail feathers of *Atrichornis* could be taken.

A. Alar tract

Figs 1-9, Table 1

1. Primaries. In *Atrichornis*, ten well developed primaries are present. All of the remiges overlap laterally in the same way: the distal (outer) vane of each remex overlaps the proximal vane of the next distal feather. The diameter of the calamus gradually decreases outwards; the last two primaries have a markedly smaller rachis. Neighbouring downy feathers are absent on both sides of the wing. On the dorsal side, the first four primaries are accompanied by two proximal filoplumes (6 mm long), the fifth and sixth primaries have only one proximal filoplume, and the rest have none. On the ventral side, no filoplumes are found near

the primaries.

Menura possesses eleven primaries: ten are well developed and the eleventh is weaker. In this feature, *Menura* differs from most Passeres and resembles many non-passerines. Other passerines known to have eleven primaries include *Corvus* (Morlion & Vanparijs, 1979). From the innerside to the tip of the hand, the calamus diameter of the primaries gradually decreases. All of the remiges overlap laterally as in *Atrichornis*. On the dorsal side of the wing near the base of each of the primaries, three downy feathers are found, one or two of them lying in the skin fold between the primaries. Filoplumes are absent. On the ventral side of the wing, Prim. I up to Prim. III, inclusive, have on their proximal side a downy feather inserted on the skin fold and under the corresponding upper greater primary covert. Prim. IV up to Prim. IX, inclusive, have a proximal downy feather over their calamus. Prim. X has no proximal, but four distal downy feathers.

2. Secondaries. In *Atrichornis* there are nine secondaries, as in most Passeres. They show the same overlapping as the primaries and lie parallel with each