THE STATUS OF "*MUS*" *NOVAEHOLLANDIAE* WATERHOUSE, AND ALLIED FORMS.

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As the subdivisions of the pseudomyid group of rats and mice are essential to the discussion of individual relationships, it is appropriate to emphasize that in 1910 Oldfield Thomas stressed their importance when defining the subgenera of *Pseudomys* (*sensu lato*) by stating that: "This genus contains species of very varied skull and molar structure, and it is with some hesitation that I leave such diverse species as, for example, *P. australis* and *P. forresti* under the same generic heading."

It is therefore clear that his subdivisions were not merely tentative, as suggested by Finlayson, but that it was actually their subgeneric status which Thomas considered possibly inadequate, when hesitating to retain them under the one genus. The elevation of the four subgenera to generic status in the Check-List by Iredale and Troughton[1] is therefore in accordance with the views of Thomas, as confirmed by his fixation of the subgenera by the nomination of genotypes, comparative diagnoses, and grouping of their known forms.

A striking example of the value of generic distinction, between species of close external resemblance, is provided by the central Australian *Gyomys desertor* Troughton, 1932, which authors previously confused with the south Western Australian *Thetomys nanus* Gould, 1858. The cranial and dental features actually represent the extremes in group distinction, *Thetomys* having the strongly concave zygomatic plate and subsidiary cusp to m^1, in contrast with the normal plate profile and absence of cusp in *Gyomys*.

Even if intergradation shown by extensive material eventually merges *Thetomys* with *Pseudomys* (*sensu stricto*), it is surely evident that the species of these allied genera, possessing the concave zygomatic plate, must be generically distinguished from the smaller *Leggadina* and *Gyomys*, which have the normally murine straight or convex zygomatic profile. Regarding the inference that variability affects the diagnostic value of the antero-internal cusp on m^1, presence or absence of which separates the pairs of allied genera, it is notable that a similar cusp distinguishes the Indian genus *Leggada*, upon which name Thomas based that of one of the subgenera, further emphasizing their generic distinction.

As possession of the subsidiary cusp is supported by differences in pterygoid and molar structure in distinguishing *Leggadina* from *Gyomys*, and the more normal pterygoid and molar pattern is associated with a subsidiary cusp in

[1] For general references, see Iredale and Troughton.—Check-List of the Mammals Recorded from Australia, Mem. Austr. Mus., vi, 1934.