Descriptions of New Species of the Diverse and Endemic Land Snail Amplirhagada Iredale, 1933 from Rainforest Patches across the Kimberley, Western Australia (Pulmonata: Camaenidae)

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ABSTRACT. Fifteen species of the camaenid land snail *Amplirhagada*, which are endemic to the Kimberley region in Western Australia, are newly described in the present work based on material collected in 1987 during the Kimberley Rainforest Survey of the then Dept. Conservation and Land Management, Western Australia. These species were listed previously as new discoveries under preliminary species identifications but have never been validly described. All of them were collected in rainforest and vine thicket patches across the Kimberley, where they generally occur as narrow-range endemics. The species are most typically characterized by a peculiar penial anatomy while other morphological structures, such as the shell or radula, provide characters less or not suitable for unambiguous species identification. Three manuscript taxa listed as potentially new are here preliminarily subsumed under an already described taxon, *A. carinata* Solem, 1981. By contrast to all other species treated herein, *A. carinata* has a fairly large distribution around the Walcott Inlet in the Southwest Kimberley. This taxon also reveals a comparatively large amount of morphological variation not only with respect to the shell but also to its genital anatomy. This unusual morphological variation is discussed as being potentially indicative of on-going lineage differentiation and the presence of a species complex, which cannot be satisfactorily resolved at the present stage.

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The Kimberley region in northwesternmost Western Australia has been found to harbour a hyper-diverse radiation of camaenid land snails, which matches in species richness some of the most diverse land snail faunas worldwide (Köhler, 2010a). Despite the valiant work of Alan Solem (1931–1990) over many years, a large proportion of this land snail fauna has remained undescribed. In contrast to many other groups of helicoid land snails worldwide, the

Camaenidae in northwesternmost Australia (i.e., in the Kimberley and immediately adjacent regions of the Northern Territory) have micro-ranges and are usually restricted to small islands of rainforests and vine thickets, where they occur as local endemics.

Recently, molecular comparisons have revealed high levels of mitochondrial divergence between *Amplirhagada* species from several offshore islands along the Kimberley