Quantification of Shell Banding Polymorphism in the East African Tree Snail*sitala Jenynsi* (Pulmonata: Ariophantidae)

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Abstract
In eastern Africa, populations of the tree snail *Sitala jenynsi* are monomorphic, dimorphic or trimorphic for the width of the upper brown band on their shells.We measured the variation in the width of this band in several populations and analysed it using two mutually verifiable methods: arithmetical probability paper and regressions of log-transformed shell metrics. The demarcations of the three morphs in areas of spatial overlap between the band-width states have been defined. We recognized existence of*type I* narrow-banding which associates monomorphism, and *type II* narrow-banding, medium banding and wide-banding forms which associate polymorphism. We have also quantified the variation in three other characters, two of which are also polymorphic: a lower pigmented band and an upper unpigmented 'ghost band'. The evolutionary implications of the findings are discussed. Continued use of varietal names to describe the banding polymorphism of *S. jenynsi* is recommended, in preference to the multidimensional colour pattern notation commonly applied to gastropods.

Key words
Mollusca,
Gastropoda,
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Arboreal snail,
Band width polymorphism