Geographic Energetics of the Andean Mouse, Abrothrix andinus

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Abstract

We measured basal metabolic rate, thermal conductance, body temperature, and temperature differential of three populations of the Sigmodontine-rodent *Abrothrix andinus* in three different habitats of the Andean range of northern Chile. Individuals from the three habitats were good thermoregulators, were capable of maintaining a high mass-independent temperature differential, and were able to survive the cold ambient temperatures during the night. We compared our data with previously published information on seasonal energetics of another population of *A. andinus* in the Andean range of central Chile and with species of the genus *Abrothrix* in a Mediterranean climate. Energetics of *Abrothrix* did not vary in response to different climatic conditions, which favored the hypothesis that it was a fixed character probably reflecting a common ancestor of Andean origin or radiation along the Andes Mountains.