

Microclimate and microhabitat selection in nocturnal rodents of central Chile: A test between biophysical and experimental approaches

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We contrasted two approaches to test the hypothesis that microclimate influences selection of microhabitat by two species (*Abrothryx longipilis* and *Phyllotis darwini*) of nocturnal rodents of central Chile. Microhabitats analyzed included patches of continuous vegetation (mesic microhabitat), the most used by rodents, and patches with low vegetational cover, including the space beneath the shrubs (under-bush microhabitat), and the space among shrubs (open-space microhabitat). In the first approach, we compared the cost of thermoregulation expected in each microhabitat by computing the minimum energy expenditure and the fraction of the metabolic scope an animal would have to allocate just to maintain homeothermy. We also contrasted microhabitats in terms of the rate of cooling by aluminium cylinders. In the second approach, we compared field measurements of food intake and loss of body mass of animals maintained in wire-mesh cages during night with or without food. Figures from the anima