Hematocrit and hemoglobin levels in some chilean rodents from high and low altitude

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Hematocrit levels were measured on a series of Chilean mammals including PHYLLOTIS DARWINI RUPESTRIS, AKODON ANDINUS, AKODON BERLEPSCHII, LAGIDIUM VISCACIA and CHINCHILLA BOLIVIANA from high altitude; and PHYLLOTIS D. DARWINI, AKODON (ABROTHRIX) LONGIPILIS, ORYZOMYS LONGICAUDATUS, NOTIOMYS MEGALONYX, ABROCOMA BENNETTI, OCTODON DEGU, CHINCHILLA VELLIGERA and ORYCTOLAGUS CUNICULUS from near sea level. Translocation of 3 highland species to sea level for 2 months did not reduce their hematocrits. The offspring of two highland species showed no reduction in hematocrit after birth and rearing in the laboratory at sea level.Hematocrit levels by species ranged from 380 to 540 ml/l but showed no correlation with the altitude of origin. The hematocrit in "more vigorous" species at both high and low altitudes was about 20% higher than in "less vigorous" species.The erythrocyte hemoglobin concentrations ranged from 295-316 g/l for 4 highland species (plus P. D. DARWINI). Lower values (256-278 g/l