Leaf selection by two Bornean colobine monkeys in relation to plant chemistry and abundance

Abstract

Focusing on the chemical basis of dietary selection while investigating the nutritional ecology of animals helps understand their feeding biology. It is also important to consider food abundance/biomass while studying the mechanism of animal food selection. We studied leaf selection in two Bornean folivorous primates in relation to plant chemistry and abundance: proboscis monkeys inhabiting a secondary riverine forest and red leaf monkeys inhabiting a primary forest. Both species tended to prefer leaves containing higher protein levels, although more abundant plant species were chosen within the preferred species, probably to maximise energy gain per unit time. However, the two species showed clear differences in their detailed feeding strategy. Red leaf monkeys strictly chose to consume young leaves to adapt to the poor nutritional environment of the primary forest, whereas proboscis monkeys were not highly selective because of the better quality of its common food in the riverine forest.