

The diet and feeding behavior of the black-and-white colobus (*Colobus guereza*) in the Kalinzu Forest, Uganda

ABSTRACT

One of the goals for primate feeding ecology is to understand the factors that affect inter- and intra-specific variations. Therefore, a detailed description of basic feeding ecology in as many populations as possible is necessary and warrants further understanding. The black-and-white colobus (*Colobus guereza*) or guereza is widely distributed in Africa and is one of the well-studied colobines in terms of their feeding; they demonstrate considerable variation in their diets in response to local conditions. We studied the diet of a group of guerezas in the Kalinzu Forest, Uganda, for over 30 consecutive months using behavioral observation (4308 h in total), phenology, and vegetation surveys. A total of 31 plant species were consumed by the study group. This study group was predominantly folivorous; the majority of their feeding time was involved in feeding on young leaves (87%). However, during certain times of the year, fruits and seeds accounted for 45% of monthly feeding time. Young leaves of *Celtis durandii* were by far the most important food, which constituted 58% of the total feeding records. There was a significant increase in the consumption of fruits and flowers once young leaf availability was low, but their consumption of fruits did not significantly increase even when fruit availability was high. Their monthly dietary diversity increased as the number of available plants with young leaves declined, suggesting that much of the dietary diversity in the study group may be attributable to the young leaf portion of their diet. Our findings may help contribute to a better understanding of the dietary adaptations and feeding ecology of guerezas in response to local environmental conditions.