

## ONTOGENY OF PLANT SELECTION RELATED TO NUTRITIONAL AND MEDICINAL PROPERTIES IN WILD CHIMPANZEES

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In order to investigate self-meditative behaviors in wild chimpanzees, we monitored the health and the consumption of unusual and bioactive plant foods (UBF) in Kibale National Park (Uganda). During the study period (270 days in 2007), 46 chimpanzees were present in the Kanyawara community and parties were followed from nest to nest. We recorded symptoms of respiratory and digestive illness, wounds and ophthalmic lesions during 15-min focal observation of each individual. A list of 76 UBF was established based on long-term observations and phytochemical bioassays and all ingestions occurring were recorded. The sampling effort was similar across sex and age. During the study period, males were significantly more frequently sick than females, diarrhea and sneezing being recorded significantly more often. Significant positive correlations between diseases and UBF consumption across months and among individuals were observed. The consumption of UBF was 4 times more frequent in mature (over 10 years) chimpanzees who were more affected by diarrhea than younger. For both age classes, significant positive correlations of UBF ingestion with cough and with wounds were recorded while the association between UBF consumption with diarrhea and with sneezing existed only in mature individuals. These results provided first evidences that chimpanzees consumed more bioactive plants in the context of diseases and that the appropriate plant selection is likely learned. Diseases being a serious threat to Apes survival, preserving the diversity of the flora within chimpanzees' home range should be today considered as a priority.

Keywords : *Pan troglodytes schweinfurthii*; self-medication; health monitoring; zoopharmacognosy