Macronutrient Composition Of Plants Consumed By Wild Black And White Ruffed Lemurs (V*arecia variegata*) In Betampona Natural Reserve, Madagascar.

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Macronutrient composition was determined on a dry matter (DM) basis for plants (n=121) consumed by wild black and white ruffed lemurs. Samples were collected based on direct observation of foraging by the study group for a period of one year. Plant parts included fruits (n=80), young leaves (n=37), and flowers (n=4). Mean nutrient concentrations (mean ± standard error for fruits, leaves, and flowers, respectively were: crude protein (CP), 7.11 ± 0.36 %, 15.19 ± 0.95 %, and 7.94 ± 0.92 %; Fat, 10.71 ±1.34 %, 6.26 ± 0.76 %, and 8.70 ± 4.54 %; neutral detergent fiber (NDF), 39.79 ± 2.03 %, 47.88 ± 2.31 %, and 44.21 ± 4.75 %; acid detergent fiber (ADF), 30.49 ± 1.62 %, 31.92 ± 1.91 %, and 31.70 ± 4.36 %; lignin (LIG), 11.96 ± 0.89 %, 13.43 ± 1.02 %, and 12.44 ± 3.16 %; Ash, 6.02 ± 0.28 %, 5.34 ± 0.24 %, and 5.41 ± 0.72 %; calcium (Ca), 0.38 ± 0.04 %, 0.44 ± 0.05 %, and 0.64 ± 0.26 %; phosphorus (P), 0.10 ± 0.01 %, 0.18 ± 0.08 %, and 0.14 ± 0.04 %; potassium (K), 2.00 ± 0.12 %, 1.70 ± 0.18 %, and 1.53 ± 0.31 %; magnesium (Mg), 0.20 ± 0.01 %, 0.21 ± 0.02 %, and 0.21 ± 0.06 %; and sodium (Na), 0.23 ± 0.03 %, 0.19 ± 0.04 %, 0.27 ± 0.11 %. Leaves were higher in DM, CP, ADF, NDF, and LIG. Fruits were higher in FAT and ASH. All plant parts were similar in P and Mg content however, flowers were higher in Ca and Na, and fruits were higher in K. All nutrients for plant parts were higher compared to cultivated fruits and vegetables, however digestibility studies are required to define bioavailability of the nutrients to ruffed lemurs.