INTAKE AND DIGESTION IN BABIRUSA (*BABYROUSA BABYRUSSA*) AND RED RIVER HOGS (*POTAMOCHOERUS POREUS*) FED HIGH FIBER DIETS

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Abstract

Previous studies suggest that fiber-digestion capacity of exotic swine species has not been challenged in captive feeding programs. Zoo diets are often low in dietary fiber, which may contribute to obesity, with accompanying joint and possible reproductive problems. Five-day feeding trials were conducted with 3 adult (2.1) babirusa (BAB) (*Babyrousa babyrussa*) housed separately, and 2 (1.1) adult red river hogs (RRH) (*Potamochoerus poreus*) housed together at the Bronx Zoo. Diets consumed by BAB averaged (as-fed (AF) basis): 30% high fiber herbivore pellet, 60% produce, and 10% mixed hay, and contained 11% crude protein (CP), 10% crude fat (CF), 40% NDF, and 22% ADF (all nutrients on a dry matter (DM basis). RRH consumed a diet comprising (AF): 61% high fiber exotic swine pellet, 34% produce, and 5% mixed hay containing 14% CP, 14% CF, 37% NDF and 19% ADF. Intake averaged 2.0 to 2.8% of body mass; DM intake was 1.3 to1.5% for RRH and BAB, respectively. Apparent digestibilities of DM (82 vs. 73%), CP (75 vs. 73%), and fiber fractions (NDF 77 vs. 69%; ADF 68 vs. 65%) were higher in BAB compared with RRH; CF digestibility (90 vs. 81%) was higher in RRH. Digestive anatomy of RRH has not been described in the literature; from these data we hypothesize RRH have a digestive tract more similar to domestic pig than babirusa.[1,2,3] Although diets fed to the two species in this study were not identical, both species showed significant fiber fermentation ability, and may derive health benefits from higher fiber diets.

LITERATURE CITED

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