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Abstracts

## SHORT COMMUNICATIONS

### NECTAR DILUTION INCREASES METABOLIC RATE IN THE LESSER DOUBLE-COLLARED SUNBIRD

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*Abstract.* When nectar is dilute, nectar-feeding birds must ingest relatively large volumes to compensate for its low caloric value. We hypothesized that consumption of large volumes of dilute nectar leads to higher energetic requirements, as a result of factors such as increased foraging activity or the need to warm larger volumes of liquid to body temperature. We tested this hypothesis in Lesser Double-collared Sunbirds (*Nectarinia chalybea*) by feeding birds kept at 20°C either 0.2 or 1.2 M sucrose. We found that during the day, mass-specific metabolic rate was 15% higher on the dilute than on the concentrated diet. Virtually this entire increase can be accounted for by calculated food-warming costs.

*Key words:* Lesser Double-collared Sunbird, metabolic rate, nectar concentration, *Nectarinia chalybea*.