VARIABILITY IN MORPHOLOGICAL TRAITS AS A REPRODUCTIVE STRATEGY IN A LIZARD MODEL

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Sexual selection is an important force driving the evolution of morphological traits.
We aimed at elucidating the variability of morphological traits as a reproductive strategy in the context of sexual competition in lizards.

As a model of study we focused on two phylogenetically sister Tegu lizards, *Tupinambis merianae* and *T. rufescens*, which are phenotypically similar and exhibit male-biased sexual size dimorphism.

We quantified the variation in sperm traits between species, among males and within males in both species. We also quantified sexual differences of the Pterygoideus jaw muscle, the relationship with male reproductive condition and temporal variation throughout the reproductive period.

We found substantial within-male variation for all sperm traits. Moreover, we also observed significant variation in the mean values and within-male variation of sperm traits among males of both species. Furthermore, we detected differences between species in all sperm components. These results suggest that within-male variation in sperm traits may be a strategy to afford sperm competition.

Moreover, in both species males had larger jaw muscles than females, mainly during the reproductive activity. Seasonal increment of muscle mass at maturity suggests that jaw muscle might be a secondary sexual character acting as an honest signal of reproductive condition.