Quantifying sexual conflict in a simultaneous hermaphrodite

Sexual encounters are usually accompanied by conflicts of interest between the mating partners. In animals with separate sexes such sexual conflicts can play a crucial role in the evolution of reproductive systems, and can even lead to speciation. Conflict arises when male strategies evolve that enhance the chances of fertilization, but at the same time reduce the reproductive potential of the female partner. That such conflicts also occur in simultaneous hermaphrodites may seem less obvious. After all, simultaneous hermaphrodites are male and female at the same time and especially for that reason potential conflicts have long been overlooked. However, recent research has revealed that sexual conflicts can occur and may even take more extreme forms that in species with separate sexes. In order to investigate the details of sexual conflict in hermaphrodites at different biological levels, we use the hermaphroditic pond snail (*Lymnaea stagnalis*). With an intergrative approach, we hope to quantify the investment in the different components of male reproduction. Also, we will investigate which male component induces the observed feminization of the recieving partner. Finally, we will investigate whether costs imposed by the male function can be avoided by the recipient. This research is expected to significantly contribute to coming to a full understanding of sexual conflicts in simultaneous hermaphrodites.

Duration:

4 years (15 november 2006 - 14 november 2010)

Participants:

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