

Sexual conflict in the simultaneously hermaphroditic pond snail *Lymnaea stagnalis*

Sexual encounters are usually accompanied by conflicts of interest between the partners. Such sexual conflicts play a crucial role in the evolution of reproductive systems of animals with separate sexes (*i.e.* gonochorists) and can even lead to speciation. This can result in male strategies that enhance the chances of fertilisation, but at the same time negatively affect the female reproductive potential. That such conflicts can also occur in simultaneously hermaphrodites has long been overlooked, mainly because such animals are male and female at the same time. Nevertheless, recent research indicates that sexual conflicts arise and may even lead to more extreme adaptations than in gonochorists. While theoretical and correlational evidence is accumulating, experimental evidence demonstrating that hermaphroditic sperm donors indeed negatively affect recipients' fitness is still lacking. Our aim is to provide such evidence for sexual conflict in simultaneous hermaphrodites. We will use the great pond snail (*Lymnaea stagnalis*) for which previous research already suggests that all ingredients for sexual conflict are present. Using a multi-disciplinary approach, involving many different techniques, we will not only try to come to an understanding of the evolutionary aspects of the conflict, but also investigate the behavioural, physiological and biochemical details.

Duration:

3 years (1 July 2005 - 1 July 2008)

Participants:

[Joris Koene](#), [Kora Montagne-Wajer](#), Andries ter Maat, [Dick Roelofs](#), [Nico van Straalen](#)
Gregg T. Nagle (University of Texas, Medical Branch)