

**Unilevel chamber**

**Objectives:**

In both genders, sexual behavior is divided in appetitive and consummatory components (Beach, 1976). Appetitive behaviors are associated with sexual desire, excitement and arousal; whereas consummatory behaviors consist of genital stimulation leading to orgasm. In females, appetitive behaviors, also named proceptive behaviors, consist in anogenital investigation, solicitations, hops and darts, ear wiggling, while males display anogenital investigation, chase the females and attempt to mount them. The consummatory phase consists in female receptive behavior, referring to lordosis a posture which allows male mounts, intromissions and ejaculations. All these parameters can be easily measured in plain test arenas such as the unilevel chambers.

**Summarized methodology:**

The unilevel chamber consists of a glass chamber (60x30x35 cm) where male and female behaviors can be easily observed. Prior to sexual contact, male and female rats are acclimated separately to the unilevel chamber. Once the animals are sexually experienced, copulatory tests are conducted to measure and compare male and female sexual responses either before (baseline) and after treatment administration, or between groups (males or females according to the goal of the study) receiving different treatments.

**Endpoints:**

- Sexual motivation :
  - females : number of solicitations and number of hops and darts
  - males : mount latency, intromission latency
- Copulatory behavior :
  - female receptivity : lordosis quotient and intensity
  - male copulatory behavior : number of mounts, intromissions, ejaculations

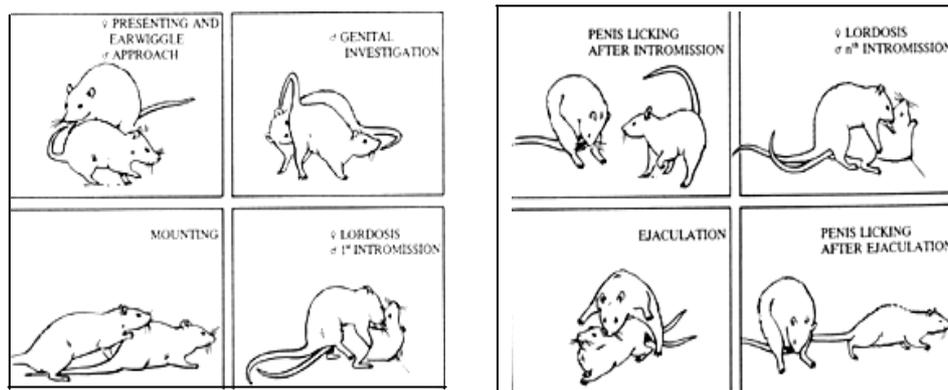


Figure 1: Different components of male and female rat sexual behaviors (Slob and van der Werff ten Bosch, 1997)

**Related Pelvipharm bibliography:**

Rössler, A.S. et al. *J Sex Med* (2006) : 3:432-441

**Links to applicable therapeutic areas / targeted disorders:**

**- Sexual pharmacology**

- \* ED (Erectile dysfunction)
- \* Ejaculatory disorders
- \* FSD (Female Sexual Dysfunction)