

1. PURPOSE

This Standard Operating Procedure (SOP) describes the procedures for treating pinworm infestations in rodent colonies.

2. RESPONSIBILITY

Veterinary care staff, animal care staff

3. MATERIALS

- 3.1. Selamectin topical solution 120mg/mL
- 3.2. 70% isopropyl alcohol
- 3.3. Automatic repeating pipettor

4. PROCEDURES

- 4.1. Once it is known that a room is positive for fur mites, limit the transfer of animals out of that room (unless the receiving room is under treatment as well). If absolutely necessary, animals can be received in fur mite positive rooms but will have to be treated according to the same schedule.
- 4.2. Treatment should be instituted at the earliest convenient time for the animal care staff and research staff.
- 4.3. For barrier facilities, treat the whole positive room and all other rooms in which positive animals could have been transferred to. For conventional facilities, consider treating the whole facility.
- 4.4. Treatment with selamectin topical solution:
 - 4.4.1. The recommended dose is 10mg/kg.
 - 4.4.2. Administer three treatments, at 14-day intervals.
 - 4.4.3. Prepare a 1:1 solution with of selamectin and 70% isopropyl alcohol.
 - 4.4.4. Mice:
 - 4.4.4.1. Using automatic pipettor, administer 6uL of the selamectin solution to each adult mouse and 3uL to each unweaned pup. Pups must be at least 10 days old to be treated. Hairless neonates are not treated.
 - 4.4.5. Rats:
 - 4.4.5.1. Using automatic pipettor, administer 60uL of the selamectin solution to each adult rat and 30uL to each unweaned pup. Pups must be at least 10 days old to be treated. Hairless neonates are not treated.
 - 4.4.6. A single drop is applied between the scapulae at the time of cage changing. Do not apply to wet coat or broken skin.
 - 4.4.7. Following treatment, animals must be transferred into clean cages. Wire bar lids and filter tops should be changed at least once during the course of the treatment.
 - 4.4.8. After each treatment, each cage is labeled with the date of administration.
- 4.5. Animal husbandry:
 - 4.5.1. Attend those animals last in the work day, wearing gloves and a designated gown.
 - 4.5.2. For barrier facilities, no need to autoclave soiled cages prior to processing; no need to treat waste as regulated medical waste.

- 4.5.3. For conventional facilities, consider autoclaving cages on a few occasions during the treatment to try to break the cycle of recontamination.
- 4.5.4. In all cases, be careful when disposing the dirty bedding to limit aerosols and contamination of the room and the rest of the facility (e.g., dumping in dump station).
- 4.6. Before considering a room negative after treatment, wait at least 6 weeks and randomly test 10 cages (preferably weanlings) per room by PCR.

SOP REVISION HISTORY

DATE	PREVIOUS VERSION	NEW VERSION
2017.08.31	4.4.5.1. Using automatic pipettor, administer 60uL of the selamectin solution to each adult mouse [...].	4.4.5.1. Using automatic pipettor, administer 60uL of the selamectin solution to each adult mouse rat [...].