

1. PURPOSE

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

2. RESPONSIBILITY

2.1. Veterinarian:

- 2.1.1. Diagnose the infestation and prescribe treatment.
- 2.1.2. Determine duration: 9 or 13 weeks (5 or 7 cycles).
- 2.1.3. Conduct post-treatment tests.

2.2. Animal Facility Manager:

- 2.2.1. Inform investigators and users of infestation, treatment and any special procedures.
- 2.2.2. Ensure treatment is followed as described in this SOP.

2.3. Animal Care attendant:

- 2.3.1. Supply animals with the medicated feed or water according to the schedule described in this SOP.

3. MATERIALS

- 3.1. Irradiated medicated feed for barrier facilities or regular medicated feed for conventional animals containing 22% or 150 ppm of fenbendazole.
- 3.2. Ivermectin sheep drench 0.08%.

4. PROCEDURES

- 4.1. Once it is known that a room is positive for pinworms, limit the transfer of animals out of that room (unless the receiving room is under treatment as well). Animals can still be received in pinworm positive rooms.
- 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. If using fenbendazole medicated feed:
 - 4.4.1. Provide the medicated feed ad libitum on weeks 1, 3, 5, 7, 9, (11)*, (13)* and regular feed on weeks, 2, 4, 6, 8, 10, (12)*, (14)*.
* Treat for a minimum of 5 cycles, but ideally 7.
 - 4.4.2. Provide just enough food for 7 days to avoid wasting the medicated feed.
 - 4.4.3. No need to remove leftovers on off weeks, just complete with enough non-medicated feed for 7 days.
- 4.5. If using medicated water with ivermectin 0.008 mg/mL:
 - 4.5.1. Prepare medicated water bottles by mixing 1 volume of ivermectin sheep drench 0.08% with 99 volumes of water.
 - 4.5.2. Treat one cage of each distinct strain with ivermectin medicated water. If after 3 days no adverse reaction is seen, place the remaining animals on ivermectin medicated water.

- 4.5.3. Provide the medicated water on weeks 1, 3, 5, 7, 9, (11)*, (13)* and regular water on weeks, 2, 4, 6, 8, 10, (12)*, (14)*.
 - * Treat for a minimum of 5 cycles, but ideally 7
- 4.6. Animal husbandry:
 - 4.6.1. Attend those animals last in the work day, wearing gloves and a designated gown.
 - 4.6.2. For barrier facilities, no need to autoclave soiled cages; no need to treat waste as regulated medical waste.
 - 4.6.3. For conventional facilities, consider autoclaving cages on a few occasions during the treatment to try to break the cycle of recontamination.
 - 4.6.4. 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).
- 4.7. Before considering a room negative after treatment, wait at least 3 months and randomly test about 10-20 cages of weanlings per room by PCR.