

A

Mature stock females mate and lay eggs in control or contaminated medium to rear experimental subjects.

Larvae and pupae can be sampled and tested here.

Discard stock females so target experimental subjects (now in egg stage) only remain. Eggs will develop in medium until eclosion (unless testing other developmental stages).

Collect newly-eclosed adults within 6-hrs of eclosion (depending on test species) and place adults on either control medium or medium matching pre-eclosion exposure (depending on research questions).

Newly-eclosed adults and adults at various ages post-eclosion can be sampled and tested here.

Adults remain in medium until reached desired age post-eclosion (depending on research questions).
Transfer adults to control medium for 24-hr depuration.

Adults can be tested here.

Collect adults to be tested for accumulation here.

B

F_0 (Parents)

Rear F_0 parents in control or contaminated medium from egg stage to reproductive maturity. Transfer parents to control medium for 24-hr depuration. Mate males and females in control or contaminated medium.

Discard parents so F_1 offspring (now in egg stage) only remain. Eggs will develop in medium until eclosion.

F_1 (Offspring)

Collect newly-eclosed F_1 offspring and place them in control or contaminated medium from egg stage to reproductive maturity. Transfer F_1 offspring to control medium for 24-hr depuration. Mate F_1 males and females in control or contaminated medium.

Discard F_1 offspring (now in egg stage) so only F_2 offspring remain. Eggs will develop in medium until eclosion.

F_2 (Offspring)

Continue until reached desired generation.