

Synchronization via Egg Lay

This method, like spot bleaching, is a relatively quick way to get a small number of semi-synchronized worms.

Procedure:

1. Pick gravid adults to a fresh, seeded plate. How many will depend on the number of worms you need for your experiment – about 10 N2 worms at their egg laying peak will lay around 30 worms in 45 minutes. Be very careful not to pick any stray eggs or larvae along with these gravid adults.
2. Leave the worms to lay eggs for 45 minutes to an hour. Check to see if you have around the number of eggs you want and leave the worms for longer if necessary.
3. Remove any adults from the plate so only the eggs remain. This is very important! If even one adult is left behind, the synchronization is ruined.

Synchronization via *Modified* Egg Lay

To use if need larger scale synchronization, but the worms do not handle bleaching well.

Procedure:

1. Pick or chunk a large number of gravid adults to a 10cm seeded plate.
2. Allow adults to lay eggs- the more laid on the plate, the better. Depending on the number of worms you passage to the plate and the number of worms you want synchronized, this could be anywhere from a few hours to overnight.
3. Add about 5mL of M9 and give the plate a swirl to loosen the worms still stuck to the agar.
4. Tilt the plate on its lid so the liquid and worms drain to one side of the plate.
5. Aspirate off the liquid and worms. Most of the eggs should remain stuck to the agar.
6. Add about 1mL of M9 and gently shake for about 5 minutes to loosen the OP50.
7. Aspirate off the M9 and OP50.
8. Repeat steps 6 and 7 several more times until all the OP50 is gone. Many of the eggs should still be attached to the plate.
9. Let the eggs hatch overnight. Since there is no food, the larvae should arrest at the L1 stage.

Reference:

Tali Gidalevitz, 2008.