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Counting worms / *C. elegans* / nematodes

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Protocol status: Working

We use this protocol and it's working

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Abstract

Count worms, e.g. arrested L1s after an overnight starvation in M9 on a rotating wheel.

Materials

MATERIALS

 Leica L2 binocular microscope

 Menzel Gläser (slides)

 Click counter Amazon

 Wormy solution

STEP MATERIALS

 Click counter Amazon

 Leica L2 binocular microscope

 Wormy solution

Protocol materials

 Wormy solution

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 Wormy solution

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 Leica L2 binocular microscope

1 Shake your wormy solution to make the concentration of worms in it more homogeneous.

 Wormy solution

2 Pipet 10 microlitres of wormy solution in a streak onto a glass slide. Don't pipet the 10 ul in a blob. That would make it harder to count.

3 From left to right, or right to left, follow the streak under the microscope and count the worms. For this, you can use a manual click counter to make it easier. You should aim to count between 50 and 150 worms. If the number of worms in 10 ul is higher than this, make a dilution of the wormy solution to achieve between 50 and 150 worms in 10 ul. If the number of worms is less than 50 per 10 ul, consider increasing the volume counted.

 Click counter Amazon

 Leica L2 binocular microscope

4 Count another two slides and take the arithmetic mean. You can then infer the concentration of worms for any volume. The inferred concentrations from the three replicates give you an idea about the range within which the true concentration of worms lies.