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Cooking Larvae Diet

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Bustamante S, Vila-Sanjurjo
A, Smyth GK, Ballard JWO
(2018) Genotype to
phenotype: Diet-by-
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- 1 Weigh out agar 1 g per 100 ml of food to be prepared
- 2 Weigh out 0.022 g sugar, 2.719 g treacle, 7.938 g yeast and 7.321 g semolina per 100 ml of food for the 1:2 P:C diet, or 0.934 g sugar, 14.596 g treacle, 1.285 g yeast and 1.185 g semolina per 100 ml of food for the 1:16 P:C diet
- 3 Measure out water into large beaker, add small amount from large beaker to separate beaker
- 4 Add semolina to the small beaker and stir to ensure semolina is hydrated, leave aside
- 5 Add agar and sugar to large beaker and mix
- 6 Mark the volume on the beaker in pen
- 7 Place in microwave and bring to boil

- 8 Add treacle to large beaker, mix, and bring to boil
- 9 Add yeast to large beaker, mix, and bring to boil, continue heating until mixture stops over-boiling
- 10 Once the food will not boil over, add water to marked level to maintain the correct volume
- 11 Boil for 10 minutes, mixing every 3 minutes, adding water to maintain volume
- 12 Remove food from microwave and allow mixture to cool to 70°C
- 13 Add semolina
- 14 Allow food to cool to 60°C
- 15 Add 1ml of 10% propionic acid, 1 ml of 1% phosphoric acid, and 0.4 ml of 25% nipagin dissolved in 100% ethanol per 100ml of food cooked
- 16 Stir until semolina maintains suspension in the food

- 17 Pour 25 ml of food per bottle
- 18 Ensure semolina maintains suspension in the food mixture, stirring the food in the bottle if necessary
- 19 Leave food to set and cool for 2 h
- 20 Store food for no more than 1 week