**Extraction of Strawberry DNA**

**Aim**: To extract DNA from strawberries

**Materials**

- Strawberry (x1)

- Zip-lock plastic bag

- 10mL of DNA extraction buffer

- Piece of stocking (the “strainer”) and an elastic band

- 150 mL beaker

- test-tube (x2)

- test tube rack

- small beaker of ice-cold ethanol

- glass rod or skewer

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**DNA extraction buffer:**

- 5 mL liquid dish washing detergent or shampoo

- 0.75g salt

- 45mL water

**Method**

1. Make the DNA extraction buffer following the method above.

2. Wash the strawberry, remove the sepals (the green leaves) and put it into a zip lock plastic bag. Add 10mL of the extraction buffer and seal the bag tightly, making sure any air bubbles are pushed out and gently crush the strawberries with your fingers on the bench surface for approximately 1-2 minutes.

3. Stretch the stocking over the 150mL beaker and secure with the rubber band.

4. Pour the strawberry DNA extraction buffer mixture into the stocking and filter the mixture into the beaker.

5. Pour the filtered liquid into a test tube and discard the stocking and the strawberry pulp.

6. Carefully layer an equal volume of ice-cold ethanol on top of the strawberry solution in the test tube using a pipette (the ethanol should float on top).

7. Twirl a glass rod through the section between the strawberry solution and ethanol and observe what happens. Keep the tube still at eye level and do not shake it.

8. Add 10mL of ethanol into the second test tube.

9. Remove DNA by twirling with a glass rod and add to test tube containing 10mL of ethanol.

**Questions**

1. What’s the purpose of crushing cells and adding detergent?
2. What’s the purpose of the salt?
3. What does the alcohol do?