DNA extraction - strawberries

In this practical you will extract the DNA from strawberries. Strawberries can have up to eight copies of each chromosome and so contain a lot of DNA. When extracted from the strawberry this volume of DNA means it is visible to the naked eye as white threads.

Materials

- 1 x Strawberry
- 10 ml Washing up liquid
- 1g salt
- 100 ml water
- 10 ml ethanol (cold)
- 1 x filter paper
- 1 x sealable plastic bag
- Cocktail stick or lolly stick

Method

1. Put the strawberry into the plastic bag, seal it and crush for about 2 minutes.

2. Mix together 10ml of washing up liquid, 1 g of salt and 100ml water in a beaker. This mixture will break down cell membranes and release the DNA.

3. Add 10ml of the extraction liquid to the bag with the strawberry. Mix together for 1 minute.

4. Filter the strawberry mixture.

5. Pour 10ml of ice-cold ethanol down the side of the beaker into the strawberry mixture, do not mix or stir. The DNA will separate out into this layer.

Within a few seconds you should see a white cloudy substance form in the clear layer above the strawberry mixture. Use a lolly stick to pull strands of this out of the top layer.

This is the strawberry DNA.