



ISOLATE DNA OUT OF A KIWI

Material

- Kiwi
- Scale
- NaCl (common salt)
- Detergent
- Distilled water (or water from a bottle)
- 2 beakers (250 ml)
- Sharp knife and cutting board
- Water bath 60°C
- Timer
- Ice
- Stirring stick
- Coffee filter
- Funnel
- Suction bulb
- Pipette (10 ml)
- Test tube and rack
- 9 ml ice-cold alcohol 96%
- Long glass stick

Preparation

1. Mix 3 g NaCl with 10 ml detergent. Ling with water till 100 ml.
2. Cut the peeled kiwi in tiny pieces (5 mm²). Put the pieces in a beaker and pour over the detergent-NaCl mixture.
3. Mix it all by making turning movements with the beaker. Place it during 15 min in the water bath (60°).
4. Let the mixture cool down a bit.
5. Place the coffee filter in the funnel. Pour the mixture through the filter and collect it in a second beaker (= filtrate). Be careful that the foam on the surface does not pollute the filtrate. The obtained filtrate is an extract of kiwi containing DNA and soluble proteins.
6. Bring 6 ml of the filtrate in a test tube.
7. Pour very carefully a layer ice-cold alcohol on top of the filtrate. Let it rest for 2-3 minutes.
8. Turn gently with the glass stick at the interface. Proceed cautiously not disturbing the different layers. As the fragile DNA easily breaks. A white web of mucous DNA is now visible.