

DNA Isolation from Banana

Requirements:

- Banana (Peeled, one small piece)
- Dish Liquid soap (roughly 5ml)
- Table Salt (1 Table spoon)
- Water (50 ml)
- Alcohol/ Sanitizer (10-15 ml)
- Strainer

Step 1: Add 5 ml of liquid soap to the beaker containing 50 ml of water

Step 2: Add a table spoon of common salt and mix well

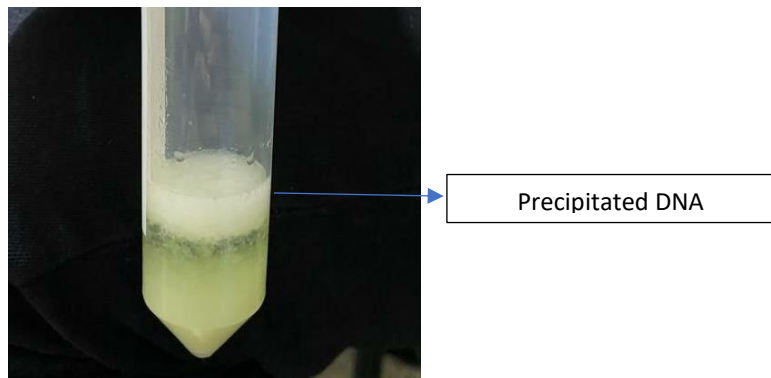
Step 3: Place a small piece of Banana (Peeled) into a zip lock cover and pour the soap, water and salt mixture into it.

Step 4: Mash the banana piece with your fingers until it becomes a fine paste

Step 5: Empty the contents of the Zip lock cover into a beaker. Pass it through a strainer while doing so.

Step 6: Keep around 50 ml of alcohol/sanitizer in the freezer to chill.

Step 7: Pour out roughly 20 ml of the strained mixture into a smaller beaker. Pour the chilled alcohol into the same along the side. Wait for 5 min. to see the DNA threads precipitating on the top layer.



Role of each component:

- Liquid dish soap: Detergent; ruptures the cell lipid membrane to release the DNA
- Common Salt: Removes the proteins binding the DNA and aids in DNA precipitation.
- Strainer: Removes cell debris
- Alcohol: Precipitates the DNA