Testing a Leaf for Starch

Aim

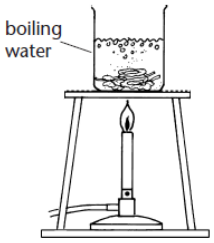
The aim of this experiment is to compare a covered part of a leaf to an uncovered part of a leaf to see what effect the absence of light has on the production of starch.

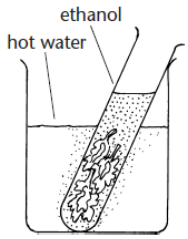
Equipment

- 250 ml Beaker
- Boiling tube
- Bunsen burner, gauze, mat, tripod
- Ethanol
- White tile
- Iodine solution
- Tweezers
- Safety Goggles
- Leaves

Method

1. Heat a beaker of water.
2. You will need two leaves: one that has been in light and one that has been partially or totally covered from the light.
3. When the water is hot, add a leaf.
4. Wait **3 minutes** for the leaf to boil (this is to get rid of the waterproof layer and break open the cells and make the leaf soft).
5. Take out the leaf using tongs.
6. Put the leaf in a boiling tube and cover with ethanol (this is to remove the chlorophyll).
7. Put the tube of ethanol plus leaf into the beaker of hot water **WITHOUT** the Bunsen burner being on: ethanol is **highly flammable**.
8. Dip it back into water to wash the ethanol off.
9. Spread the leaf out on a tile. Add about five drops of iodine solution on to the leaf and observe.





You will need to do this for **BOTH** your leaves, and make comparisons between the two.

Conclusion

Write your conclusion stating what you found and why it was like that.