

To bee or not to bee: the chemistry of honey Angle of rotation

The angle of rotation of sucrose and invert sugar

Artificial honey is also called invert sugar. This is because the sign of the angle of rotation is reversed compared to that of sucrose.

Materials

- Invert sugar or artificial honey (10 g)
- Sucrose (10 g)
- Measuring flasks (100 ml)
- Distilled water (200 ml)
- Polarimeter
- Pipettes
- Balance

Procedure

- 1) Dissolve 10 g sucrose in 100 ml water in a 100 ml measuring flask.
- 2) Dissolve 10 g invert sugar in 100 ml water in a 100 ml measuring flask.
- 3) Using a polarimeter, determine the angle of rotation of both solutions.

Results

Angle of rotation of the sucrose solution (conc. 10 g/100 ml):	
Angle of rotation of the invert sugar solution (conc. 10 g/100 ml):	