The Hunt for Glucose Find the Flower's Treasure

At the base of the two short anthers in the Fast Plants flowers are two dark green, glistening nectaries producing the nectar (glucose) that helps to attract the bee to the flower.

Can you prove that the flower really produces nectar? Follow the procedure and go for the glucose!

Materials

- Fast Plants flower
- white index card
- toothpick
- clear adhesive tape, 2 cm wide
- cocktail straw, 3 cm section
- glucose enzymatic test strip (e.g., Diastix®)
- magnifier or hand lens

Procedure

 Peel off a strip of 2 cm clear adhesive tape. Fold over about 1.5 cm at one end to make a flap. Stick a 1.5 cm length of the opposite end to the back of an index card.



2. Pick a Fast Plants flower and press it onto the tape near the edge of the card. Tape a square of test strip near the end of the adhesive tape.



- 3. Place a drop of water on the test strip using the straw.
- 4. Place a film can magnifier over the flower.



- 5. With the toothpick, spread the flower parts, pressing them to the sticky tape, until you see the green nectaries and glistening nectar at the base of the pistil.
- 6. Probe the nectaries with the toothpick, then touch the tip of the toothpick to the moist test strip.
- 7. Is there a color change?
- 8. Voila! A color change is proof of glucose!
- 9. To preserve the bee's treasure, fold and press the flower and tape back onto the card.
- 10. To continue your hunt for treasure, try using the test with flowers from various other plant species!

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