**Tests for Nutrient Molecules**

Plant samples will need to be ground with a mortar and pestle before applying the following chemical tests.

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| **Nutrient** | **Indicator** | **Positive test** |
| **Glucose**  a monosaccharide  a simple carbohydrate | Add crushed sample and  **Benedict's solution** to a test tube and heat gently. | Solution turns brick red |
| **Starch**  a polysaccharide  a complex carbohydrate | Add crushed sample and **Iodine solution** in a dimple tray. | **Solution turns blue-black** |
| **Protein** | Add crushed sample and **Biuret Solution** in a dimple tray. | **Solution turns purple.** |

**Chromatography - Separating the pigments in leaves.**

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| **Chlorophyll is** an enzyme and so it is a protein.  Crush leaf material in a mortar with a pestle.  Use a pipette to add a crushed sample of green leaf 2 cm from the end of chromatography paper.  Dip and leave the paper in test tube that has 1cm of alcohol. | **Macintosh HD:private:var:folders:O9:O93lozVVE-KI-CwS0i6I5E+++TI:-Tmp-:TemporaryItems:3.2.24ch.GIF** |