**Tests for Nutrient Molecules**

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

|  |  |  |
| --- | --- | --- |
| **Nutrient** | **Indicator** | **Positive test** |
| **Glucose**a monosaccharidea simple carbohydrate | Add crushed sample and**Benedict's solution** to a test tube and heat gently. | Solution turns brick red |
| **Starch**a polysaccharidea 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.**

|  |  |
| --- | --- |
| **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** |