

## Guttation Demonstration

Guttation occurs when there is high soil moisture and low evaporation stress. Simple diffusion pressure in roots moves water upward through the xylem tissue of the plant - often forcing the water to be exuded from vein tips in leaves. The special leaf tip cells are called **hydathodes**. You can typically see guttation in Seattle during the spring and early summer, in the early mornings before the sunlight evaporates the water. Grasses and many herbaceous plants, such as strawberries, guttate nicely. Guttation can not be observed during rain, since the rain drops coat the plant surfaces, and should not be confused with dew, which can condense from the atmosphere onto plant surfaces.



Guttation

### Materials Needed

Wheat Grass seedlings

Bell Jar

Vaseline to seal bell jar to keep humidity high inside of bell jar

### Procedure

Well watered Wheat grass seedlings have been placed under a bell jar and grown in bright daylight.

### Observations

Has guttation occurred?