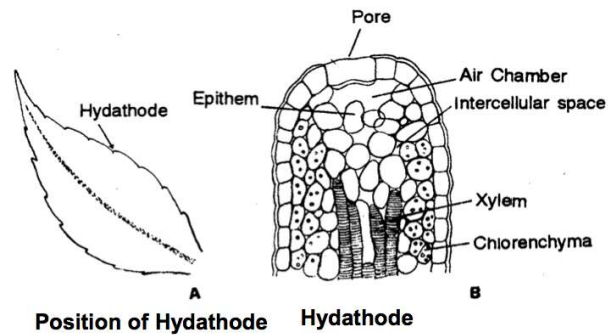


Guttation

Guttation is the process by which water droplets are exuded from the edges or tips of leaves. It occurs when soil moisture is high, and root pressure forces water up through the xylem, especially at night when transpiration is minimal. Unlike dew, which condenses from the atmosphere, guttation comes directly from the internal water system of the plants.

Guttation usually happens through specialized structures called hydathodes, located at the margins of the leaves. This process is more common in small herbaceous plants like grasses, strawberries, and certain vegetables. The droplets often contain dissolved minerals and organic compounds, and when the water evaporates, it can leave behind a white residue on the leaves.



Guttation plays a minor role in water regulation and nutrient transport in plants, but excessive guttation may indicate overwatering or poor drainage.