

Distinguish, differentiate, compare and explain what is the difference between Guttation and Transpiration. Comparison and Differences.

Difference between Guttation and Transpiration

1. Guttation is the loss of liquid droplets from the plant. Transpiration is the loss of water by a plant in the form of vapours.
2. Guttated water is a dilute solution of both inorganic and organic substances. The transpired water is pure water.
3. Guttation commonly occurs at the margins and the tips of the leaves. Transpiration occurs through the general surface of the leaves and the young stems.
4. Guttation mostly occurs during night and early hours of the morning. Most of the transpiration occurs during the hotter periods of the day. It is negligible during night.
5. Guttation occurs through water pores called hydathodes. Transpiration occurs through stomata, lenticels and epidermal cells.
6. The water pore is always kept open in guttation. Stomata can be opened or closed in transpiration.
7. Guttation does not occur under condition of water deficiency. Transpiration continues even when the plant is under water stress.
8. Excessive guttation does not cause loss of turgidity. Excessive transpiration produces wilting.