

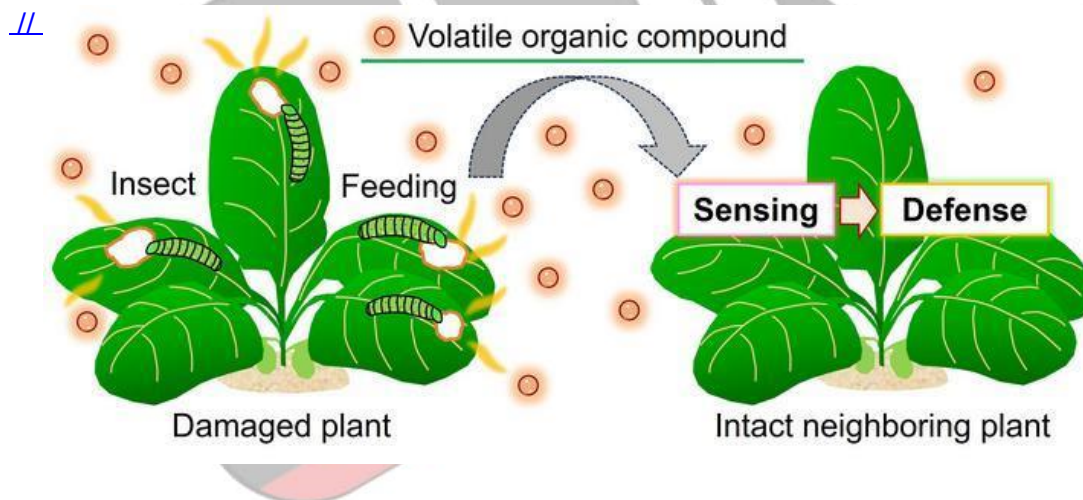


Science of Plant Communication

[Source: TH](#)

Plants though silent exhibit a **sophisticated communication system** crucial for their survival functioning through chemical signals and underground networks.

- **Chemical Warning System:** Plants release **volatile organic compounds (VOCs)** when threatened by **herbivores** or other dangers.
 - These **airborne and soil-borne signals** alert neighbouring plants to prepare **defensive mechanisms** like producing **toxins**.
 - VOCs can **travel through the air and soil**, allowing communication over considerable distances to protect plants.
- **Wood Wide Web:** Through **symbiotic relationships** with **mycorrhizal fungi**, plants form an **underground network** called “**wood wide web.**”
 - This fungal network facilitates **nutrient exchange and distress signals**, helping plants collectively **respond to droughts or pests**.
- **Cooperation and Support:** Plants share nutrients to aid struggling neighbours, especially in resource-scarce environments like **dense forests**.
 - This cooperative behaviour fosters ecosystem **resilience and enhances** overall forest health.



Read More: [Plant-to-Plant Warning Signals.](#)