Phytophthora Control in Pepper

Pepper vines are often planted close to the trunks of shade trees, creating specific soil conditions that influence root health. The traditional method of applying **NPK fertilizers** in a **small root zone** can negatively impact soil **organic carbon levels**, disrupt beneficial microbial activity, and alter soil **electrical conductivity**. These factors contribute to **poor soil structure, water runoff, and weak root systems**, making the plants more vulnerable to **Phytophthora infections**. Strengthening soil health and root resilience is crucial in preventing disease outbreaks and ensuring sustainable pepper cultivation.

Objective:

To **enhance soil structure, organic carbon levels, and root system health**, creating an environment that prevents **Phytophthora infections** in pepper vines and promotes stronger, more resilient plants.

Application Guidelines:

1. **Prepare the Soil Drench Mixture:**
    - **DIY 6% Liquid Humate – 160 ml per 200 L of water**
      (Enhances soil organic matter, improves nutrient retention, and supports microbial activity.)
    - **NBS Microshield – 40 g per 200 L of water**
      (Boosts beneficial microbial populations, supporting natural defence mechanisms.)
    - **NBS Pseudotech – 40 g per 200 L of water**
      (Helps maintain soil microbial balance and suppress harmful pathogens.)
    - **NBS Root Max – 100 ml per 200 L of water**
      (Promotes healthy root development, improving nutrient and water uptake.)

Method of Application:

- Apply **5 litres of the prepared soil drench per vine**, ensuring even distribution around the base.
- Cover a **600 mm radius from the base of the pepper vine** to optimize nutrient absorption and microbial activity.
- **Follow-up treatments may be required** during the growing season, particularly in high-risk periods, to maintain soil health and strengthen plant resistance.

By implementing this **soil restoration and root-enhancing approach**, pepper vines develop **stronger root systems, improved nutrient uptake, and enhanced resistance** against Phytophthora and other soilborne stressors.