

Precaution

- Keep away from reach of children
- Do not expose to direct sunlight
- Store in dark and cool place
- If by chance comes in contact with eyes, wash with clean water and seek advice of a physician
- Don't use containers or equipments previously used for chemical fertilizers/ pesticides/fungicides to prepare Dr. Soil solution



Dr. Soil was found effective in improving soil fertility as well as mulberry yield (22,497 kg/ac/yr) and OC in the soil (0.74%), microbial biomass carbon (28%) and cocoon productivity (70 kg/100 dfls).



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Bio-Stimulant to improve Soil Fertility and Soil Health for Quality Mulberry Leaf Production

Mulberry, the primary food plant of silkworm and cultivated mainly for its foliage, plays an important role in the overall productivity of silk. Maximization of leaf yield and improvement in the quality are considered to be important steps for enhancing the silk cocoon production. Mulberry improvement in terms of yield and quality can be accomplished through application of fertilizers and nutrient supplements. High yielding varieties with intensive cultivation practices, mono-cropping system and imbalanced fertilizer application year after year affects the soil quality besides exposure to environmental pollution and climatic



variations. Further, repeated leaf harvests in mulberry crop results in quick depletion of nutrients in the soil, thereby affecting the subsequent leaf harvests and cocoon yields. Soil replenishment with balanced fertilizers is essential to maintain consistent leaf productivity and soil fertility.

Low rainfall with uneven distribution, receding ground water, non-adoption of soil and water conservation practices are major constraints for the reduction in mulberry leaf productivity due to lower levels of soil organic carbon and soil organic matter. Loss of carbon and nitrogen are more pronounced due to low rain fall and high temperatures. These constraints warrant development of cost-effective and eco-friendly technologies for improving mulberry leaf productivity in low soil moisture conditions. Supplementation of soil with organic liquid fertilizers is one of the avenues for improving mulberry productivity.

Dr. Soil is an organic liquid fertilizer containing microbial consortia with macro and micro nutrients for improving soil fertility and soil health. It is advocated as an agronomical tool for the sustainable quality mulberry leaf production and improved cocoon productivity.



Method of application

- For one acre of mulberry, apply 15 MT Farm Yard Manure in 2 splits per year
- Apply Dr. Soil - liquid fertilizer @ 25 litres for 1st crop; 10 litres each for 2nd and 3rd crop
- 5 litres per crop of Dr. Soil is enough from the 4th crop onwards
- Apply Dr. Soil through drip irrigation

OR

§ In case of plantations irrigated through channels (flood irrigation), mix the required quantity of Dr. Soil as mentioned above in 200 litres of water and mix with irrigation water

Advantages

- Acts as a buffering agent and stabilizes soil reaction (pH)
- Enhances availability of soil organic carbon (SOC), soil organic matter (SOM), available NPK and micronutrients to plants
- Source of energy for microorganisms which helps in performing various beneficial functions in soil (nitrogen fixation, mineralization etc.)
- Solubilizes some mineral compounds present in soil and make them available to plants
- Chelates metals such as Fe, Zn, Cu, Mn etc., for enhanced availability and uptake
- Improves mulberry leaf quality and yield
- Improves commercial characters of silkworm cocoon
- Avoids chemical fertilizer application leading to reduced cost of production, besides supporting environmental protection