Brief note on Micro propagation studies in Turmeric (curcuma longa Linn).

Zhao Chen*

Clemson University, SC, USA

Turmeric (curcuma longa Linn.) is a lasting herbaceous monocotyledon flavor has a place with zingiberacae family and is developed widely in Asian nations, Turmeric is an old and consecrated flavor of India it is otherwise called the "Brilliant zest of life". It is a significant business flavor and having high restorative worth that filled in India. Biotic pressure (phythium aphanidermatum) and abiotic stress (dry spell and saltiness) force a significant danger in curcumalonga L. Crop. In this way, the endeavor is to create pressure open minded plants are of colossal critical to expand crop profitability. Lately, tissue culture situated in-vitro choice has arisen as a plausible and savvy instrument for creating pressure lenient plants. In this way, the biotechnological approaches like miniature spread method will shower the light in the creation of sickness open minded clones of curcumalonga L. Also, plants need to counter the persistent dangers by climate, for example, microbe assaults and brutal states of being (like saltiness), plants perceive these danger signals through the receptors and sensors and enact the guard reaction to balance out against these burdens. The reaction incorporates collection of auxiliary metabolites (curcumin). Upgraded combination of optional metabolites, called "ELICITATION" guarantees the endurance, constancy and intensity of the plant. The current survey examines about the distinctive elicitation techniques through biotic elicitors (chitosan, meJa and salicylic corrosive) that could bring the expanded yield of optional metabolites like curcumin by elicitation & in improvement of Root Knot Nematode Resistance in restoratively gainful plant curcumalonga L.

• Turmeric is only vegetatively engendered crop utilizing rhizomes, flowering of turmeric is extremely uncommon. In

Accepted on March 11, 2021

any event, when it blossoms, scarcely any seed is delivered. For this explanation, turmeric cultivators are use at any rate one sound bud containing rhizome pieces as seed, in view of this it is important to hold 20-25% of yearly creation for raising the accompanying season crop.

• More finished, its rhizome augmentation is exceptionally low, in a developing season (8-10 months), just 10-15 sidelong buds can be delivered.

• Preservation of rhizome seeds is difficult occupation it requires a lot of time and space. Other than these, they are inclined to harms because of various factors like unfriendly climate, bug and microorganism and so forth, Low profitability, illness suceptibility and greater expense of creation are serious issues looked by turmeric cultivators.

• Thus, Micropropagation concentrates in turmeric (*curcuma longa* L.) will shower light underway of illness safe harvests in less term of time with high yielding efficiency. More finished, the elicitation studies will help In high curcumin content and elicitors like salicylic corrosive will actuate high protection component against rhizome decay illness in Turmeric.

• Plants are consistently uncovered with various biotic and abiotic stress, which cause critical misfortune in crop yields around the globe, while the significance for food is climb. Hence, it tends to be inferred that manageable mix of conventional agrarian practices with current biotechnology can engage the achievement of food security for present and just as future. Hereditarily adjusted harvests will have a high capability of biotechnology and can be extrinsic for humanity.

*Correspondence to:

Zhao Chen Clemson University USA E-mail: cz2457@cumc.columbia.edu J Agric Sci Bot 2021 Volume 5 Issue 2