Reduction of crop losses has been a major concern for the agricultural fraternity of the country. The objective of feeding the increasing population with the diminishing cultivable land makes it even more challenging. To attain the set targets chemical pesticides and fertilizers usage in the farms has increased tremendously. Though the use of chemicals results in better yield and protection from the pests and pathogens, but the ill effect is transferred to the crop or vegetables in form of toxic residues that gets incorporated in the food chain resulting in magnification at each trophic levels. To avoid the biomagnifications of the toxic residues in the food, development of sustainable strategies for managing disease development in the crops has become the need of the hour.

Anthracnose of chilli (*Capsicum annum* L.) caused by *Colletotrichum capsici* (Sydow) Bisby and Butler, is one such disease whose management is still a challenging task for the plant pathologists. Being an important economic commodity for the country in terms of export to different countries of the world, chilli holds a crucial position in Indian cuisine as well. The loss in yield and production of the crop encountered by the farmers has attained huge figures. Further, the tremendous use of chemical pesticides to manage the disease has lead to upsurge of deposition of toxic residues in the fruits and seeds, thereby leading to the decrease in quality and quantity of export value for the crop in the global market. A sustainable approach for managing the disease in order to reduce the crop loss is the urgent need.
The use of beneficial microbes for controlling the growth of pests and pathogens has gained momentum in recent years. Under natural conditions, microbial populations are known to play functional roles among the communities with simultaneous interactions with the plants in a synergistic manner utilizing different complementary modes to provide enhanced disease resistance against the pests and pathogens. The efficacy of utilizing *Trichoderma* isolates as biofertilizers and biopesticide has acclaimed huge success around the world for different plant-pathogen systems. Though, the generally recommended and utilized isolates of *Trichoderma* as BCAs are isolated from the rhizospheric region, the possibility of exploring the less exploited regions for a potent BCA strain remains undone. The present study was aimed to study the efficacy of *Trichoderma* isolates obtained from the phyllosphere region of chilli plants in combating the colonization and growth of *C. capsici* on the chilli plant and to propose an effective integrated disease management strategy for controlling anthracnose of chilli in the region studied combining the benefits of *Trichoderma* isolates and the reduced doses of fungicides.