**Scope of the Present Investigation**

Pineapple is the third major commercial, high valued fruit crop grown all over India. Pineapple is an important fruit both nutritionally and nutraceutically. It is rich in Bromelain (1.5 %). Bromelain is currently utilized for therapeutic purposes like- antioxidant, anti-inflammatory, platelet aggregation inhibitory, inhibition of tumor cell growth and metastasis as well as debridement of burns.

Pineapple fruits usually have a very short post harvest life. Decay due to Stem end rot (SER) caused by *C. paradoxa* is an important factor, which limits the storage life of pineapple, and results in appreciable losses at wholesale, retail, and consumer levels. The tropical climate that prevails in India further aggravates the spoilage in pineapple. Post-harvest losses of around 70 % have been reported in India. Economic losses caused by post-harvest pathogens are costly in terms of money and man power, can be catastrophic for developing country like India. Hence there is an urgent need to minimize post-harvest loss due to Stem end rot spoilage in pineapple.

The conventional approach to control fungi has been the use of synthetic antifungal compounds. However, recently doubts have increasingly been expressed about the safety of many fungicides. It has emerged that, a significant number of commonly used fungicides pose threat to human health and environment. This necessitates developing an alternative, effective, nontoxic or zero residues, host friendly and pathogen specific
treatments to control post-harvest pathogens. This demands a clear understanding of intricate relationship that exists between host and pathogenic factors. Hence a detail investigation was undertaken with the following objectives.

1. Etiology of stem end rot (SER) disease in pineapple.
2. Host-pathogen factors in SER disease of pineapple fruit
4. Physical and chemical measures to control SER disease