

Chapter V

Conclusion

1. The effective media for shoot induction growth and propagation of internode explants from *Nyctanthes arbor-tristis* L. was MS medium supplemented with BA 0.4 mg/l. However, the best condition for induction of multiple shoots could be achieved on MS medium supplemented with BA 0.4 mg/l and NAA 0.1 mg/l.
2. The root induction condition could be successfully established within 6 weeks in full-strength MS medium with 2,4-D 0.1 mg/l
3. Extracts of leaves and stems from mother plants *Nyctanthes arbor-tristis* L. were detected by TLC with $R_f = 0.22$ and 0.27 , to contained β -sitosterol and triterpenoid respectively. Leaf and stem of tissue culture were also detected with $R_f = 0.36$ to contained β -sitosterol.
4. The extracts of leaves and stems from mother plants showed bacterial activity in agar medium with *E. coli* and *B. subtilis* at 0.15 mg/ml, 0.075 mg/ml while antifungus activity in *S. cerevisiea* and *Aspergillus sp.* were shown at 0.15 mg/ml only. The extracts of leaves and stems from tissue culture showed microbial activity in *E. coli*, *B. subtilis* and *S. cerevisiea* at 0.15 mg/ml while in *Aspergillus sp.* were not found.
5. Crude extracts of *Nyctanthes arbor-tristis* L. from mother plants and tissue culture (leaves and stems) showed inhibition of growth of bacteria:

E. coli, *B. subtilis* while they showed partial inhibition of growth in *S. cerevisiae* and *Aspergillus sp.*

6. Extraction of carotenoid from corolla tube of *Nyctanthes arbor-tristis* L. were found 844 mg/kg by TLC with $R_f = 0.93$.