CONTENTS

Acknowledgement
Abbreviations

1. INTRODUCTION  1-19
   1.1 General Introduction
   1.2 General introduction of Capparis decidua
   1.3 General introduction of Boswellia serrata

2. REVIEW OF LITERATURE  20-31
   2.1 Review of Capparis decidua
   2.2 Review of Boswellia serrata

3. GENERAL MATERIALS AND METHODS  32-36

4. CLONAL PROPAGATION OF CAPPARIS DECIDUA  37-75
   4.1 Research Methodology
   4.2 Results
      4.2.1 Axillary Bud Break and Axillary Shoot Proliferation 47
         Sterilization and inoculation of explants
         Seasonal effect on bud break response
         Effect of plant growth regulators on axillary bud break
         Effect of different media
      4.2.2 In vitro shoot multiplication 50
         Effect of plant growth regulators
         Effect of different basal media
         Effect of strength of MS medium
         Effect of liquid and semi-solid medium
         Effect of different sucrose concentration & effect of different carbohydrate
         Effect of pH
         Effect of Adenine sulphate
         Effect of polyamines
      4.2.3 In vitro Rooting 56
         Effect of auxins
Effect of strength of MS medium
Effect of different media
Effect of liquid and semi-solid medium
Effect of temperature

4.2.4 Ex vitro Rooting
Effect of IBA

4.2.5 Hardening, acclimatization and Filed Transfer
Mychorrizal association for ex vitro hardening
Tables
Plates

5. IN VITRO CLONING OF BOSWELLIA SERRATA

5.1 Research Methodology
5.2 Results

5.2.1 Micropropagation of Boswellia serrata
5.2.1.1 Axillary shoot proliferation
Sterilization of nodal segment
Effect of season
Effect of plant growth regulators

5.2.1.2 In vitro shoot multiplication
Effect of plant growth regulator

5.2.2 Macropropagation of Boswellia serrata
Effect of auxins
Tables
Plates

6. DISCUSSION

7. SUMMARY & CONCLUSION

8. REFERENCES