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### 1. Surface Sterilization

### 2. Shoot Tip Culture

- Effect of different concentrations of BAP either alone or with IAA/NAA on shoot multiplication of shoot tips of C. intybus using MS/B\(_5\) media.
- Effect of different concentrations of 2,4-D either alone or with BAP/Kn on shoot multiplication of shoot tips of C. intybus using MS/B\(_5\) media.
- Effect of different concentrations of TDZ either alone or with IAA on shoot multiplication of shoot tips of C. intybus using MS/B\(_5\) media.
- Effect of different concentrations of Kn either alone or with IAA/NAA on shoot multiplication of shoot tips of C. intybus using MS/B\(_5\) media.
- Effect of different concentrations of IBA either alone or with BAP/Kn on shoot multiplication of shoot tips of C. intybus using MS/B\(_5\) media.

### 3. Nodal culture

- Effect of different concentrations of BAP either alone or with IAA/NAA on shoot multiplication of nodal segments of C. intybus using MS/B\(_5\) media.
- Effect of different concentrations of 2,4-D either alone or with BAP/KN on shoot multiplication of nodal segments of C. intybus using MS/B\(_5\) media.
- Effect of different concentrations of TDZ either alone or with IAA on shoot multiplication of nodal segments of C. intybus using MS/B\(_5\) media.
- Effect of different concentrations of Kn either alone
or with IAA/NAA on shoot multiplication of nodal segments of C. intybus using MS / B_5 media.

- Effect of different concentrations of IBA either alone or with Kn/BAP on shoot multiplication of nodal segments of C. intybus using MS/ B_5 media.

4. Rooting

5. In vitro flowering

6. Conditions of Chicory Growth and Development

7. Effect of carbon sources

8. Mutagenic effect of EMS

- Effect of EMS on seed germination
- Effect of EMS on callusing
- Effect of EMS on shoot regeneration
- Effect of EMS on rooting
- Effect of EMS on pigment content
- Effect of EMS on Sugar
- Effect of EMS on Proline
- Effect of EMS on Protein
- Effect of EMS on Enzyme activities
- Effect of EMS on Esculin content

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Appendix