# INFLORESCENCES CULTURE OF DATE PALMS

**By**


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# CONTENTS


| | Page |
|---|---|
| **INTRODUCTION** | 1 |
| **REVIEW OF LITERATURE** | 4 |
| **MATERIALS AND METHODS** | 35 |
| **RESULTS AND DISCUSSION** | 48 |
| **1. Sterilization treatments** | 48 |
| **2. Embryogensis stage** | 49 |
| a. Embryos formation | 49 |
| (1) Auxin effect | 49 |
| (2) Sugar effect | 53 |
| b. Direct somatic embryos multiplication | 55 |
| (1) Cytokinin effect | 56 |
| (2) Sugars alcohol effect | 58 |
| (3) Effect of different auxins on root formation | 61 |
| **3. Callus stage** | 68 |
| a. Callus formation | 68 |
| (1) Auxin effect | 68 |
| (2) Sugars effect | 72 |
| b. Callus growth and development | 74 |
| (1) Media effect | 74 |
| (2) Complex addenda effect | 75 |
| c. Multiplication and germination stage | 78 |
| (1) Effect of media | 78 |
| (2) Complex addenda effect | 79 |
| **4. Elongation stage** | 82 |
| a. Media effect | 82 |
| b. Complex addenda effect | 83 |
| **5. Rooting stage** | 85 |
| a. Effect of media | 85 |
| b. Effect of complex addenda | 87 |
| **SUMMARY** | 93 |
| **REFFERENCES** | 99 |
| **ARABIC SUMMARY** | |

# LIST OF TABLES


| No. | Title | Page |
|---|---|---|
| 1. | Composition of different media used..... | 43 |
| 2. | Effect of sterilization treatments on contamination % of Sewi date palm inflorescences explants after two weeks of planting..... | 49 |
| 3. | Effect of auxin type and its concentrations on direct somatic embryos formation percentage after eight months……...…... | 51 |
| 4. | Effect of auxin type and its concentrations on direct somatic embryos number per floret ……...…… | 52 |
| 5. | Effect of different sugars type and its concentrations on direct formation of somatic embryos percentage after eight months..... | 54 |
| 6. | Effect of different sugars type and its concentrations on direct formation of somatic embryos number …… | 55 |
| 7. | Effect of different cytokinins on number of somatic embryos, shoots and roots proliferation after two months (one month) ……..... | 57 |
| 8. | Effect of sugar alcohol (Mannitol and Sorbitol) on somatic embryos number ……..……...… | 59 |
| 9. | Effect of sugar alcohol (Mannitol and Sorbitol) on shoot number……...….. | 60 |
| 10. | Effect of sugar alcohol (Mannitol and Sorbitol) on embryos vitrification ……..…….. | 61 |
| 11. | Effect of different auxins and its concentrations on rooting percentage……..……..…….... | 62 |

| No. | Title | Page |
|---|---|---|
| 12. | Effect of different auxins and its concentrations on roots number…... | 64 |
| 13. | Effect of different auxin type and its concentrations on roots thickness……..……..……..... | 65 |
| 14. | Effect of different auxin type and concentrations on roots length..….. | 66 |
| 15. | Effect of auxin type and its concentrations on callus formation percentage after eight months…… | 69 |
| 16. | Effect of different auxin type and concentrations on callus growth after fourteen months…….....……. | 71 |
| 17. | Effect of sugar type and concentrations on callus formation percentage after eight months ……..……..….....……. | 73 |
| 18. | Effect of sugar type and concentrations on callus growth after fourteen months ……....…….. | 74 |
| 19. | Effect of different basal media on callus growth, number of somatic embryo ……..……...……..……..…… | 75 |
| 20. | Effect of complex addenda and concentrations on callus growth…..… | 76 |
| 21. | Effect of complex addenda and concentrations on number of somatic embryos ……...……..……..…… | 77 |
| 22. | Effect of different basal media on somatic embryo number and shoots number of Sewi date palm inflorescences during multiplication & germination stage…….....……. | 78 |

| No. | Title | Page |
|---|---|---|
| 23. | Effect of complex addenda and concentrations on number of somatic embryos ……..…….…….. | 80 |
| 24. | Effect of complex addenda and their concentrations on shoots number/ embryo……...…… | 81 |
| 25. | Effect of different basal media on plant length and leaves number/shoots……..……..…… | 82 |
| 26. | Effect of complex addenda and concentrations on plant length ….…... | 83 |
| 27. | Effect of complex addenda and concentrations on leaves number /shoots ……..……..…. | 84 |
| 28. | Effect of different basal media on root number, root length and plant length ……..……...…….... | 86 |
| 29. | Effect of complex addenda and concentrations on root number...…… | 87 |
| 30. | Effect of complex addenda and concentrations on root length /plantlet…… | 89 |
| 31. | Effect of complex addenda and concentrations on plant length …...… | 92 |

# LIST OF FIGURES


| No. | Title | Page |
|---|---|---|
| 1. | Effect of different auxins concentration on direct somatic embryos formation after eight months..... | 53 |
| 2. | Effect of different treatments of cytokinin on somatic embryos number during multiplication stage..... | 57 |
| 3. | Effect of different treatments of cytokinin on shoots number during multiplication stage..... | 58 |
| 4. | Effect of different auxin concentrations on roots formation…….. | 67 |
| 5. | Effect of different auxins concentration on callus formation after eight months..... | 69 |
| 6. | Effect of different auxins concentration on callus growth.…….. | 71 |
| 7. | Effect of complex addenda on callus growth ……..…….. | 76 |
| 8. | Effect of different media on roots number…….....…….. | 86 |
| 9 | Effect of complex addenda on root formation……...… | 90 |

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## ABSTRACT

This study was conducted to produce plants from inflorescences of date palm Sewi cv. through tissue culture technique. The present work study the effects of different auxins (2,4-D, NAA, NOA, IAA, IBA and picloram) at (10, 20 and 40mg/l) and types of sugar (sucrose, glucose and fructose) at 0.1 - 0.15 and 0.2M on direct somatic embryos and callus formation after eight months. Also the effect of different cytokinin combination, sugar alcohol, different media formula (NN- MS- B5- WPM) and complex addenda (Malt extract, Yeast extract and Casein hydrolysate) at concentrations 100, 200 and 400 mg/l and type of auxins IAA, IBA and NAA at concentrations 0.0 - 0.5 - 0.1 and 0.2mg/l on growth and development of produced embryos and callus were discussed on the study. The results showed that the addition of 40mg/l picloram induced the highest percentage (39.93%) of direct somatic embryo formation while the addition of 10mg/l picloram induced the highest percentage (59.96%) of callus formation. Sucrose is the preferred carbohydrate for direct and indirect somatic embryo formation percentages. Complex addenda promote callus growth and embryo formation. Either IBA or IAA induced the highest significant number of roots/shoot.

**Key words:** Phoenix dactylifera L.**,** Inflorescence, Micropropagation, auxins, complex addenda.