

## ABSTRAK

**MISLAH SAHILA HARAHAHAP.** Pengembangan Buku Kultur Jaringan Berbasis Riset Perbanyakkan dan Pengakaran Anggrek *Dendrobium* sp. Secara *In Vitro*. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, Oktober 2020.

Penelitian ini merupakan penelitian pengembangan dengan model 4-D namun, yang dilakukan hanya 3D yaitu *define*, *design* dan *development* belum sampai ke tahap penyebarannya (*desiminate*). Teknik pengumpulan data, yaitu menggunakan kuesioner berstruktur dengan menggunakan skala Likert untuk mengetahui penilaian ahli materi, ahli desain pembelajaran ahli desain layout, respon dosen dan respon mahasiswa. Teknik analisis data dalam penelitian ini berupa analisis kuantitatif dan analisis kualitatif. Penelitian ini bertujuan untuk mengetahui kelayakan buku kultur jaringan berbasis riset perbanyakkan dan pengakaran tanaman anggrek *Dendrobium* sp. berdasarkan tanggapan validator ahli materi, ahli pembelajaran, ahli desain *layout*, respon dosen dan respon mahasiswa. Hasil penelitian menunjukkan bahwa: (1) Penilaian dua orang dosen ahli materi berdasarkan kelayakan isi, kelayakan penyajian dan keterbacaan diperoleh skor rata-rata persentase sebesar 86,87% dengan kategori sangat baik, (2) Penilaian oleh dosen ahli desain pembelajaran berdasarkan kesesuaian materi dengan SK dan KD, evaluasi, ketersediaan latihan, efisiensi buku ajar dalam pembelajaran, dan bahasa diperoleh skor rata-rata persentase sebesar 85,74% dengan kategori sangat baik, (3) Penilaian oleh dosen ahli desain *layout* berdasarkan tampilan buku dan keterbacaan diperoleh skor rata-rata persentase sebesar 88,76% dengan kategori sangat baik, (4) Penilaian oleh dosen pengampu mata kuliah kultur jaringan diperoleh skor rata-rata persentase sebesar 84,21% dengan kategori sangat baik dan (5) Penilaian oleh mahasiswa termasuk kategori sangat baik yang terdiri dari uji coba perorangan diperoleh 83,59%, uji coba kelompok kecil diperoleh 83,59% dan uji coba kelompok lapangan diperoleh 85,32%.

*Kata Kunci: Buku, Kultur Jaringan, Anggrek Dendrobium sp.*

## ABSTRACT

**MISLAH SAHILA HARAHAHAP.** Development of Tissue Culture Books Based Research on Propagation and Rooting of *Dendrobium* sp. By In Vitro. Postgraduate School of The State University of Medan, Oktober 2020.

This research is a development research with a 4-D model but only 3D is done, namely define, design and development has not yet reached the disseminate stage. Data collection techniques, namely using a structured questionnaire using a Likert scale to determine the assessment of material experts, learning design experts, layout design experts, lecturer responses and student responses. This study aims to determine the feasibility of a tissue culture book based on research on the propagation and rooting of the orchid *Dendrobium* sp. based on the responses of material expert validators, learning experts, layout design experts, lecturer responses and student responses. The data analysis technique in this research is in the form of quantitative analysis and qualitative analysis. The results showed that: (1) The assessment of two material expert lecturers based on content feasibility, presentation feasibility and readability obtained an average score of 94.84% in the very good category, (2) Assessment by an expert lecturer in learning design based on material suitability with SK and KD, evaluation, availability of exercises, efficiency of textbooks in learning, and language obtained an average score of 85.62% with a very good category, (3) Assessment by expert lecturers in layout design based on book appearance and readability obtained a score The average percentage is 93.85% in the very good category, (4) The assessment by the lecturer who teaches the tissue culture course obtained an average score of 89.11% in the very good category both consisting of individual trials obtained 94.18%, small group trials obtained 93.96% and field group trials obtained 83.88%.

*Keywords: Dendrobium sp. Development, Orchid, in vitro, Reference Book, Research*