

ABSTRAK

ERMILA HAFNI NASUTION. Pengembangan Buku Kultur Jaringan Berbasis Riset Induksi Pertumbuhan dan Pengakaran Anggrek *Cattleya sp.* Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, Agustus 2022

Pengembangan buku kultur jaringan berbasis riset perlu dilakukan sebab buku kultur jaringan berbasis riset masih sangat terbatas. Penelitian ini bertujuan untuk menghasilkan buku suplemen berbasis riset induksi pertumbuhan dan pengakaran anggrek *Cattleya sp.* Penelitian ini merupakan penelitian pengembangan dengan model 4-D. Data dikumpulkan menggunakan kuesioner berstruktur dengan skala Likert untuk mengetahui penilaian ahli materi, ahli desain pembelajaran, ahli desain *layout*, respon dosen dan respon mahasiswa. Teknik analisis berupa analisis kuantitatif dan analisis kualitatif. Hasil validasi menunjukkan, dua ahli materi diperoleh skor 88,18% dikategorikan sangat baik, validasi ahli desain pembelajaran diperoleh 88% dikategorikan sangat baik, validasi ahli desain *layout* diperoleh 87,62% dikategorikan sangat baik, hasil tanggapan dosen diperoleh 96,10% dikategorikan sangat baik dan hasil tanggapan mahasiswa diperoleh yang terdiri dari uji coba perorangan sebesar 93,87%, uji coba kelompok kecil diperoleh 88,81% dan uji coba kelompok lapangan terbatas diperoleh 87,78% dikategorikan sangat baik. Dapat disimpulkan bahwa buku kultur jaringan berbasis riset induksi pertumbuhan dan pengakaran anggrek *Cattleya sp.* layak berdasarkan ahli materi, ahli desain pembelajaran, ahli desain dosen dan mahasiswa. Buku ini dapat dijadikan sebagai salah satu sumber buku penunjang dalam pembelajaran kultur jaringan.

Kata Kunci : Buku, Riset, Kultur Jaringan, Anggrek *Cattleya sp.*



ABSTRACT

ERMILA HAFNI NASUTION. Development of Tissue Culture Book Based on Research Growth and Rooting Induction of *Cattleya sp.* Thesis. Medan: Postgraduate Program of Medan State University, 2022.

The development of research-based tissue culture books needs to be done because research-based tissue culture books are still very limited. This study aims to produce a book based on reasearch growth and rooting induction *Cattleya sp.*. This research is development research with a 4-D model. Data were collected using a structured questionnaire with Likert scale to determine the assesment of material expert, learning design expert, layout design expert, lecturer response and student responses. The data analyze technique were quantitative analyze and qualitative analyze. The results showed that, the assesment of two material experts obtained 88.18% with very good category, the assesment of learning design obtained 88% with very good category, the assesment of layout design obtained 87.62%with very good category, the assesment of the lecturer obtained 96.10% both consisiting of individuals trial obtained 93.87%, small group trials 88.81% and field group trials obtained 83.88%. it can be concluded that the tissue culture based on growth and rooting induction research book was appropriate according to the material expert, learning design expert, layout design expert, lecturer and students. This book can be used as a supporting book in tissue culture learning.`

Keyword: Book, Research, Tissue Culture, *Cattleya sp.*

