ABSTRAK

Az-Zahra Shakila Salsabila, NIM 4171141009 (2017). Pengembangan Bahan Ajar Kultur Jaringan Pada Materi Pemuliaan Tanaman Secara In Vitro Berbasis Literasi Sains.

Penelitian pengembangan ini berjudul "Pengembangan Bahan Ajar Kultur Jaringan Pada Materi Pemuliaan Tanaman Secara In Vitro Berbasis Literasi Sains". Pemilihan judul ini berdasarkan pengamatan dosen dan mahasiswa jurusan biologi Universitas Negeri Medan yang menyatakan bahwa mata kuliah kultur jaringan masih tergolong sulit untuk dipelajari, dan tingkat literasi sains di Indonesia menurut PISA masih tergolong rendah. Maka tujuan penelitian pengembangan ini secara umum adalah meningkatkan literasi sains mahasiswa salah satunya dengan cara mengembangkan bahan ajar kultur jaringan. Adapun metode penelitian pengembangan bahan ajar kultur jaringan ini mengacu pada model Dick & Carey. Namun penelitian ini baru sampai pada tahap merancang dan melakukan evaluasi formatif. Melalui penelitian dan pengembangan ini diharapkan produk yang dihasilkan sesuai dan efektif untuk digunakan dalam pembelajaran. Analisis data yang digunakan dalam penelitian pengembangan ini menggunakan analisis data deskriptif kuantitatif. Berdasarkan hasil analisis kebutuhan mahasiswa yang telah dilakukan melalui penyebaran angket kepada mahasiswa Jurusan Biologi, Universitas Negeri Medan, ditemukan bahwa 89% mahasiswa menyatakan sangat membutuhkan buku teks berbasis literasi sains pada mata kuliah kultur jaringan. Sebanyak 71% siswa mengalami kesulitan dalam mempelajari materi pemuliaan tanaman in vitro.

Kata kunci: Pengembangan, bahan ajar, kultur jaringan, in vitro, literasi sains.

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ABSTRACT

Az-Zahra Shakila Salsabila, NIM 4171141009 (2017). The Development of Teaching Material of In Vitro Plant Breeding Based on Scientific Literacy.

This development research is entitled "The Development of Teaching Material of In Vitro Plant Breeding Based on Scientific Literacy". The selection of this title was based on the observations of lecturers and students Department of Biology at Universitas Negeri Medan who stated that the tissue culture course was still quite difficult to learn, and the level of scientific literacy in Indonesia according to PISA was still relatively low. So the purpose of this development research in general is to improve student scientific literacy, one of which is by developing tissue culture teaching materials. The research method for developing tissue culture teaching materials refers to the Dick & Carey model. However, this research has only reached the stage of designing and conducting formative evaluation. Through this research and development, it is expected that the resulting product is suitable and effective for use in learning. Analysis of the data used in this development research using quantitative descriptive data analysis. Based on the results of the analysis of student needs that has been carried out through distributing questionnaires to students Department of Biology, Universitas Negeri Medan, it was found that 89% of students stated that they really needed textbooks based on scientific literacy in the tissue culture course. As many as 71% of students have difficulty in learning in vitro plant breeding materials.

Keywords: Development, teaching material, tissue culture, in vitro, scientific literacy.