ABSTRAK

Dewi Simangunsong. Pengembangan Buku Nonteks Tumbuhan Penghasil Pestisida Alami Di Kawasan Toba Berbasis Literasi Sains Sebagai Sumber Belajar Biologi Siswa SMA. Tesis. Program pascasarjana Universitas Negeri Medan. 2021.

Penelitian ini bertujuan untuk: (1) Mengetahui tingkat kelayakan buku nonteks tumbuhan penghasil pestisida alami berbasis literasi sains di kabupaten Toba menurut para ahli materi; (2) Mengetahui tingkat kelayakan buku nonteks tumbuhan penghasil pestisida alami berbasis literasi sains di kabupaten Toba menurut para ahli strategi/desain pembelajaran; (3) Mengetahui respon guru Biologi terhadap buku non teks tumbuhan penghasil pestisida alami berbasis literasi sains; (4) Mengetahui respon peserta didik terhadap buku non teks tumbuhan penghasil pestisida alami berbasis literasi sains; dan (5) Mengetahui efektivitas buku nonteks tumbuhan yang berpotensi sebagai penghasil pestisida alami dalam meningkatkan literasi sains biologi siswa SMA

Penelitian ini menggunakan teknik analisis data deskriptif. Pengembangan buku nonteks ini dilaksanakan dngan menggunakan model pengembangan Thiagarajan yaitu 4-D (*Four-D Models*). Instrumen penelitian berupa lembar penilaian validator ahli materi, ahli desain pembelajaran, dan penilaian respon guru Biologi serta respon peserta didik. Hasil penilaian kelayakan isi buku dari ahli materi termasuk dalam kategori "Sangat Baik" dengan persentase sebesar 89,76 %. Hasil penilaian kelayakan penyajian buku dari ahli desain pembelajaran termasuk dalam kategori "Sangat Baik" dengan persentase sebesar 91%. Hasil penilaian kelayakan penyajian buku dari ahli desain layout mendapatkan persentase sebesar 92,73% dengan kategori "Sangat Baik". Hasil tanggapan guru Biologi dan peserta didik terhadap buku mendapatkan persentase sebesar 92,08% dan 90,56% dengan kategori "Sangat Baik". Hasil uji efektivitas buku nonteks tumbuhan pestisida alami berbasis literasi sains termasuk dalam kategori cukup efektif dengan persentase N-gain sebesar 60,7%.

Kata kunci : Buku nonteks, Pestisida alami, Literasi sains

ABSTRACT

Dewi Simangunsong. Development of Non-Text Books of Natural Pesticide-Producing Plants in the Toba Region Based on Science Literacy as a Source of Biology Learning for High School Students. Thesis. Medan State University Postgraduate Program. 2021.

This study aims to: (1) determine the exact non-text books of plants producing natural pesticides based on scientific literacy in Toba district according to material experts; (2) The exact location of the non-text book on pesticide plants based on scientific literacy in Toba district according to the experts in learning strategy/design; (3) Knowing the response of Biology teachers to non-text books of plants producing natural pesticides based on scientific literacy; (4) Knowing students' responses to non-text books of plants producing natural pesticides based on scientific literacy; and (5) Knowing the effectiveness of non-text books of plants suspected of producing natural pesticides in increasing the biological science literacy of high school students

This study uses descriptive data analysis techniques. The development of this non-text book was carried out using the Thiagarajan development model, namely 4-D (Four-D Models). The research instrument was an assessment of material expert validators, learning design experts, and assessment of Biology teacher responses and student responses. The results of the assessment are included in the book category from material experts included in the "Very Good" category with a percentage of 89.76%. The results of the assessment are included in the book category of learning design experts in the "Very Good" category with a percentage of 91%. The results of the assessment based on books from layout design experts amounted to 92.73% in the "Very Good" category. The results of Biology teachers and students on books get a percentage of 92.08% and 90.56% in the "Very Good" category. The results of the test of the effectiveness of non-text books on natural pesticides based on scientific literacy are included in the quite effective category with an N-gain percentage of 60.7%.

Keywords: Nontext books, Natural Pesticides, Science Literacy