

ABSTRAK

ANNISA FADHILAH AZHAR. Pengembangan Buku Suplemen Berbasis Riset Tentang Lalat Buah *Bactrocera* Spp. Program Pascasarjana Universitas Negeri Medan 2021.

Penelitian ini bertujuan untuk menghasilkan produk buku ajar berbasis riset tentang lalat buah *Bactrocera* Spp. yang layak digunakan dalam matakuliah entomologi. Model pengembangan yang digunakan dalam penelitian ini adalah model pengembangan Thiagarajan (4D) yang terdiri dari tahap pendefinisian, perancangan, pengembangan, dan penyebaran. Buku ajar yang dikembangkan divalidasi berdasarkan tiga kriteria yaitu materi/isi, desain pembelajaran, desain *layout*, respons dosen pengampu matakuliah dan respons mahasiswa. Hasil validasi produk oleh ahli materi dengan nilai rata-rata sebesar 90,99 kategori “sangat baik” dan “layak”, ahli desain pembelajaran dengan nilai rata-rata sebesar 88,74 kategori “sangat baik” dan “layak”, ahli *layout* dengan nilai rata-rata sebesar 92,86 kategori “sangat baik” dan “layak”, dosen pengampu matakuliah dengan nilai rata-rata sebesar 91,16 kategori “sangat baik” dan “layak”, dan perorangan, kelompok kecil, dan kelompok terbatas secara berurutan dengan nilai rata-rata 82,71, 88,91, dan 88,52 kategori “sangat baik” dan “layak”. Hasil efektifitas penggunaan buku suplemen dengan uji t diperoleh $t_{hitung} = 13,26$ ($P=0,01$) terjadi perbedaan yang sangat signifikan antara nilai pretest dan posttest. Dapat disimpulkan bahwa penggunaan buku ajar yang dikembangkan efektif dalam meningkatkan pengetahuan kognitif mahasiswa tentang lalat buah *Bactrocera* Spp. Hasil nilai rata-rata gain sebesar 0,57 tergolong kategori sedang.

Kata kunci: Buku ajar, lalat buah *Bactrocera* Spp , dan model pengembangan 4D

ABSTRACT

ANNISA FADHILAH AZHAR. Development of Supplement Book Based On Research about Fruit Flies (*Bactrocera* Spp). Postgraduate Program Universitas Negeri Medan 2021.

The aim of the study was to produce a product in the form of a textbook based on research about the Fruit Flies *Bactrocera* Spp that are suitable for use in entomology course. The development model used in this study is the Thiagarajan (4D) development model which consists of define, design, develop, and dissemination. The developed textbooks are validated based on three criteria, namely material/content, learning design, layout design, course lecturer, and students responses. The results of product validation by material experts amounted to 90.99 in the category "very good" and "feasible", learning design experts was 88.74 in the category "very good" and "feasible", expert layout was 92.86 in the category "very good" and "feasible" and according to the lecturer who taught the subject was 91.16, in the category "very good" and "feasible". The response of individual students, small groups, large groups consecutively were of 82.71, 88.91, and 88.52 in the categories "very good" and "feasible". The results of the effectiveness of using supplement books with t test values obtained $t_{hitung} = 13,26$ ($P=0,01$). There is a very significant difference between the pretest and posttest scores. It can be concluded that the use of developed textbooks was effective in increasing students' knowledge about the fruit fly *Bactrocera* Spp. The results of the average gain value of 0.57 are classified as medium category.

Keywords: Textbook, Fruit Flies *Bactrocera* Spp, and 4D Development Model