

DEVELOPING IDENTIFICATION GUIDE BOOK OF TREE IN BIOLOGY GARDEN YSU AS A INSTRUCTIONAL MEDIA FOR THE SENIOR HIGH SCHOOL STUDENTS

by sudarsono, rio christy handziko

ABSTRACT

Botany, is a branch of biology that deals with plants. Biologists create a multilevel system of classes to simplify the process of studying biological objects. In botany, there is a system that classifies plants into 4 groups, namely Moss, Ferns, Herbs, Shrubs, and Trees. Biology gardens is one of the areas as the center of botany learning. The first step for botany learning is to observe the plants. In botany learning process, observing the plant can work well it is needed a plant identification guide book in which contains how to identify plants based on the organ by an example of a photograph. The purpose of this research is 1. Produce instructional media in the form of identification of trees for thematic environmental education. 2. Knowing the responses of biology media experts related to the feasibility of biological plant identification guide books in biology garden YSU as a thematic learning environment media. 3. Knowing the responses of the senior high schools students in the limited test, related to the feasibility of the plant identification guide book in biology garden YSU as a thematic environmental learning media. 4. Embedding the scientific name and local name on the trees in the biology garden YSU.

This research that combined with product development, that is Research and Development. This research methods are follows the 4D method. This research took the photos to identify all the trees in the biology garden YSU. The photos is matched with the species description to confirm the species of the trees. Photographs and descriptions are then used as material for preparing the trees identification guide book in the biology gardens of YSU. The book was then compiled by media experts and material experts and tested on 30 high school students. The results of student responses and tests become the revised material of the book to become the final product.

The result is, there are 54 species included in 29 families that are written in a field guide collection of trees in the biological garden of YSU. Media experts and materials experts provide an average rating of 3.72 and 3.76 of the highest scale 4. Students assign a 3.55 grade rating of the highest scale 4. scientific name and local names are plugged near the intended trees.

Kata Kunci: *Environmental learning, Guide book, Trees*