Research project of counterparts funded at UNJA

Name	Counterpart	Title
Upik Yelianti, Evita Anggereini, Raissa Mataniari	PR	Development of a booklet with teaching materials for plant taxonomy courses about orchids in the Harapan Rainforest, Jambi

Research summary

Orchids are appreciated for their aesthetic appearance and have a high economic value in society. They are widespread and occur in many different habitats. However, natural orchids are becoming rare in Jambi Province due to the decrease of their habitat, e. g. devastating forest fires in 2015 and 2019 where many trees used by orchids have died or illegal logging.

The aim of this study was to document the presence of orchids in Jambi province in a booklet for teaching purposes in order to preserve the diversity of orchid species.

The development of the booklet is based on the ADDIE model with five stages, respectively: A (analyze), D (design), D (develop), I (implement), and E (evaluate) (Lee and Owens, 2004). This research begins with a needs analysis showing that the presence of natural orchid species in Jambi has begun to decrease due to the disturbance of its habitat. Therefore, it needs to be documented in the form of a booklet as a supplement to teaching materials so that this information can be disseminated, especially to students. At the design stage, activities are carried out to determine the schedule, and the initial design of the booklet media, and compile the product assessment instrument. Next, in the "develop" stage, activities are carried out: determining material from various reference sources, looking for orchids at the collector level to be photographed, then making booklets. In the implementation phase, trials were carried out on the booklet of orchids as a product of the trial subjects, namely students of the Biology Education Study Program at Jambi University.

Research on the development of research-based booklets on orchid materials in Jambi Province has been completed. The development of the media booklet resulted from documenting Jambi's natural orchids at the collector level by taking photographs. Then it is described and identified according to the literature, both books and journals.

The results of the first stage of content expert validation of the developed booklet obtained a score of 36 (69.23%) in the good category. However, there is still revision needed, namely the addition of learning objectives. After being revised, the score increased to 43 (82.69%) in the very good category.

Based on the results of the first stage of validation, the orchid media booklet in the province of Jambi obtained a score of 36 (69.23%) with good criteria. Then revisions were made based on suggestions from material experts, so that in stage II validation, a score of 43 (82.69%) was obtained in the very good category. The revised sections are on learning objectives, basic competency content, and suitability of the material for basic competencies.

After the content expert declared the booklet valid, the learning media expert validated it. It obtained: 50 (62.50%) in the unfavorable category. Furthermore, the booklet was revised according to input from media experts and re-validated so that it obtained a score of 73 (91.25%), which is in the very good category.

Figure 1. Book Cover

References

Lee WW, Owens DL (2004) Multimedia-based instructional design. San Francisco: Pfeiffer Mayer, R.E. 2009 Multimedia Learning.