

ABSTRACT

Media has an important role in the learning process where it can attract attention and eliminate boredom of students. Media can be sourced from biodiversity in the environment which is arranged more attractively and in accordance with the needs of students in the form of an encyclopedia. This study aims to determine the types of insect pests and the validity of encyclopedia media based on the results of the identification of insect pests that destroy the flowers and fruits of robusta coffee plants (*Coffea canephora*) in Tanjung Agung village, Muara Enim district. This type of research uses Research and Development with a 4D development model (*Define, Design, Develop* and *Disseminate*) which is limited to the development stage (*Develop*). Data collection on the identification of insect pests that destroy flowers and fruits of robusta coffee plants (*Coffea canephora*) uses a diagonal method with 5 subplots and uses *pheromone traps/anthractens* traps, *yellow* traps and *light* traps. Meanwhile, the development of the encyclopedia media is validated by validators who are experts in matter, media and language. The results of the study showed that insect pests were found in 2 orders, 4 families, 4 genera and 4 species consisting of *Stenotarsus hispidus*, *Oxycetonia jucunda*, *Planococcus citri* and *Hypothenemus hampei*. The assessment of the validity of the encyclopedia by materials I and II was 95% and 90%, media experts were 85.29%, and linguists obtained a score of 90% with a very valid category. The average validation result of the three validators was 90.07%. Therefore, it was concluded that the development of a research-based encyclopedia on the identification of insect pests that destroy flowers and fruits of robusta coffee plants (*Coffea canephora*) is categorized as very valid but has not been practically tested on students in teaching and learning activities.

Keywords: *encyclopedia, identification, development, insect pests*