

ABSTRACT

*An encyclopedia is a series of knowledge books arranged alphabetically with attractive pictures to support the material presented. An encyclopedia must contain valid material to be worthy of being an additional learning resource and its use must be easy to access, like a flip book-based encyclopedia. This research contains the results of experiments on induction of duku plant shoots (*Lansium domesticum* Corr.) through tissue culture which are published in a flip book-based encyclopedia with validity tests carried out to become an additional learning resource. This study aims to determine the response of duku (*Lansium domesticum* Corr.) explants due to administration of kinetin hormone with various concentration treatments. This research also aims to determine the level of validity of additional learning resources for the encyclopedia of shoot induction tissue culture in duku plants (*Lansium domesticum* Corr.) from biological technology innovation material in phase E. The type of research used is experimentation and R&D development. The experimental stage used a completely randomized design (CRD) consisting of 5 repetitions with concentrations of 0 ppm kinetin, 1 ppm kinetin, 2 ppm kinetin, 3 ppm kinetin and 4 ppm kinetin. The results of the experimental research showed that the shoot growth response was 0%, that is, shoots had not yet grown from all treatments until 49 DAP, so kinetin was not able to influence the speed of shoot growth until the end of the observation. The resulting morphology was that the shape of the explant did not change and the color of the explant remained green until 35 DAP and began to turn yellow until the end of observation (49 DAP). The results of the development research stated that the flip book-based additional learning resource for the duku plant shoot induction encyclopedia (*Lansium domesticum* Corr.) obtained an average validation of 96.24% with a very valid category. So, this flip book-based encyclopedia is suitable for use as an additional learning resource for students in phase E.*

Keywords: *Duku, Encyclopedia, Flip Book, Kinetin, Lansium domesticum, Validity*