

## ABSTRAK

Argaloka, Aland Yusro. 2013. The influence of Combination ZPT Bap and 2,4-D to Growth Cotyledone Eksplan Callus of Akasia (*Acacia mangium*) in the MS Medium. Thesis, Department of Biology, Science and Technology, Maulana Malik Ibrahim Islamic State University of Malang.  
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**key word :** 2,4-D, Akasia (*Acacia mangium*), BAP, callus of embriogenic, ZPT

Many plants seed of *Acacia mangium* is need for Industry Plant forest (HTI), which is 4,5 ton for 200.000 ha/year. The highly necessity of the seed as caused plant's wood has many excess, such as it has degree of cellulose > 45%, degree of lignin < 25%, the fiber has value num of Runkle is small so it use for material of pulp good. But provision of seed by generative of seed is difficult. The complicated provision when seed harvesting process and when seed germination process. The other procedure for this problems are by tissue culture technique. It is added ZPT BAP and 2,4-D, it can results embryogenic kalus of *Acacia mangium*.

Purpose of this researche to know combination BAP and 2,4-D as the best for make kalus of *Acacia mangium*, and it can know the respon of make embryogenic kalus. The added of combination ZPT to MS medium with concentration of BAP 0mg/l, 1mg/l and 1,5mg/l, and then concentration of 2,4-D 0mg/l, 1mg/l, 2mg/l and 4mg/l.

The result aftter eight weeks for growth of *Acacia mangium* kalus show be diffirent It is after 56<sup>th</sup> days kalus *Acacia mangium* show 15 kalus are friable and 22 kalus are transparent, but can't grow be come embryogenic kalus of *Acacia mangium* yet. The good combination in form *Acacia mangium* kalus grow in 1mg/l BAP + 2mg/l 2,4-D. The combination can form kalus grow at 29<sup>th</sup> days with 83,3% for all eksplant. In addition to kalus is friable and transparent all.