

ABSTRAK

Sutrisno, Andik. 2012. **Content Experiment of Isoflavon Compound and Soybean Kalus Morfologi (*Glycine max* (L) Merr) with ZPT 2,4 D Extra in MS Media**. Thesis, Biologi Departement Faculty of Sains and Tecnology Maulana Malik Ibrahim State Islamic Univercity. Tutor 1: Evika Sandi Savitri, M.P. Tutor II: Moh Imamuddin, M.A.

Key word: isoflavon, soybean, and 2,4 D

Isoflavon was secondary metabolism compound which cynteticed by plant. Isoflavon compound which had more in *Leguminoceae* plant. Expecially in the soybean, with concentration about 2-4 mg. The highest concentration of compound isoflavon was found in hypocotyl and another one in cotyledon. Usually secondary metabolism got with live extraction on the plant, but this way is not evektife and beneficial if used in big scale. Because it is just got few secondary metabolism, because of that the many traw material of plant is need. Tissue culture metodh, was one way that used for secondary metabolism incloed in the plant which used specially quality of soybean with high iisoflavon potencial and 2,4 D. it is can fasted galur growing up until this reason was hoped can produce special qalyti of soybean with high isoflavon potensial.

This reaserch have been done in Genetic and plant tissue culture laboratory Biologi Departement Faculty sains and technology UIN maulana malik Ibrahim malang on July-August 2011. The reaserch planning which used was complet random planning the concyst of two factor, the first factor was 2,4 D concentration like as 0,25 mg/l, 0,5 mg/l, 1 mg/l. second factor was differend soybean: Galur IAC- 100/K 1061, K/IAC-100 1039, K/IAC-100 1030 and variety grobogan. Isoflavon content in soybean kalus was knew with coloum kromatografi seduration (KLK). The data was analised with variancy analisis (ANAVA) witch continued by Duncan distance experiment (UJD) with 5 % standart.

The reaserch produce showed there was an differend influence in soybean variety, galur and 2,4 D concentration to morphology and kalus isoflavon conten. The kalus colour and tekstur showed there is no difference every variety and galur. The carcteristic was have white yellowish and had solid teksture. The last of highest kalus produced by Grobogan variety with 1 mg/l concentration, and highes isoflavon containce was produced by IAC-100/K-1061 Galur with 1 mg/l concentration. The differencis of soybean variety and galur influence to isoflavon contain, IAC-100/K-1061 Galur which produced higher isoflavon compound, then on K/IAC 100-1039, K/IAC 100-1030 Galur and Grobogan variety.