EFFECT ON DIFFERENT CONCENTRATIONS OF STANDARD PLANT BOOSTER ON *Solanum lycopersicum* and *Capsicum annuum* MORPHOGENESIS

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ABSTRACT

EFFECT ON DIFFERENT CONCENTRATIONS OF STANDARD PLANT BOOSTER ON *Solanum lycopersicum* and *Capsicum annuum* MORPHOGENESIS

Solanum lycpersicum also known as "tomatoes" is an herbaceous annual where grown for its edible fruits. This plant species can be erect with short stems and also it long and spreading stems. *Capsicum annuum* also known as "chillies have tremendous economic values as crops and medicinal plants. This both plant species comes from family Solanaceae. Plant booster was proposed by MARDI and it consist of 10 types of organic supplements and also functioning for plant growth. The objectives were to investigate the effect of different concentration of plant booster in seeds germination and also identification of optimum concentration plant booster in both species. Moreover, the determination of callus presence in different concentrations of plant booster was also been studied. In initial stage, the plant booster solution was produced by used varieties of organic supplements such as pineapple (*Ananas comosus*), banana (*Musa acuminata*), squash (*Cucurbita pepo*), papaya (*Carica papaya*), kangkung (*Ipomea acuatica)*, shrimp paste, milk, egg, yeast and coconut sugar. The explant form both species were cultured in five different plant booster concentration which is control (no addition of plant booster), 10ml/L, 15ml/L,20ml/L and 25ml/L. Each treatments were consisted 30 number of samples. Findings showed that, the germination of seeds for both species were different. In *Solanum* species, the day for seeds germinations faster in control treatments as compared to other treatments. In *Capsicum* species, the day for seed germination in all treatment are same after one week observations. The optimum concentration from this research is control treatment compared treatments with additions of plant booster. The callus in this research are not presence. As a conclusion, the using plant booster solution as a media in plant tissue culture technique were not suitable for this both species. However, it is recommended for further studies on additional factors in the future by used in another families plants.