

**DETERMINATION OF SUITABLE TECHNIQUE FOR SEED
GERMINATION OF HERBAL PLANT, *Coriandrum sativum***

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ABSTRACT

DETERMINATION OF SUITABLE TECHNIQUE FOR SEED GERMINATION OF HERBAL PLANT, *Coriandrum sativum*

Coriander (*Coriandrum sativum*) which is also known as Chinese parsley or cilantro is a common type of spice that widely used by Malaysian. Coriander has very diverse range of uses including nutritional and medicinal purpose. Coriander germinates by seed. The aim of this study is to determine which technique is most suitable to germinate coriander seed. The coriander seeds are treating with different treatment; *in vitro* culture of MSO media, *in vitro* culture of MSO + 0.5mg/l BAP, hydroponic, soil-based field soil and soil. At the end of this study, it is shown that seeds that treated with *in vitro* culture of MSO + 0.5mg/l BAP have the highest percentage of germination with 50%. With almost half of the seeds germinate, the treatment also took least time for each root and shoot germination. Due to the presence of hormone BAP and high water concentration, the seeds has highest number of root and shoot formation after the fourth week compare to other treatments. The length of the root formed also favored by presence of BAP hormone and water availability. It can be concludes that the germination of coriander seed is more suitable by *in vitro* culture of MSO + 0.5mg/l BAP.