EFFECT OF GIBBERELLIN CONCENTRATION AND PLANTING MEDIA COMPOSITION FOR BREAKING RHYMBE DORMANCY GINGER ON PLANT GROWTH RED GINGER (*Zingiber officinale* Rosc.)

By: Haidar Dzaky Mubarak
Supervised by: Ami Suryawati and Endah Wahyurini

ABSTRACT

Red ginger (*Zingiber officinale* Rosc.) is a herbal plant that is cultivated as an ingredient in the medicinal industry. The dormancy problem of red ginger is overcome by soaking Gibberellin and the right planting medium. The research aims to determine the interaction of Gibberellin concentration and the composition of the planting media on breaking dormancy and growth of red ginger. The research will be carried out in March – June 2024 at Greenhouse Melati Asri, Ngestiharjo, Kasihan, Bantul, Yogyakarta. The research used a factorial Complete Randomized Block Design (RAKL), namely gibberellin concentration and planting media composition. The first factor is Gibberellin 0 ppm, 50 ppm, 100 ppm and 150 ppm. The second factor is the composition of the planting medium, soil: sand: cow manure (1:1:1), soil: sand: compost (1:1:1) and soil: husk charcoal: cow manure (1:1:1). The results showed that there was an interaction between the gibberellin concentration treatment and the composition of the planting medium. Treatment with gibberellin concentrations of 100 ppm and 150 ppm gave good growth. Treatment of soil planting media composition: charcoal husk: cow manure gave good growth in plant height parameters of 15 DAP, 30 DAP, 45 DAP, number of leaves aged 30 DAP, 45 DAP, longest leaf length 15 DAP, stem diameter 15 DAP, 30 DAP and root length.

Key words: red ginger, gibberellin, planting medium