

**Pengaruh Konsentrasi dan Lama Perendaman Ekstrak Bawang Merah untuk Meningkatkan Vigor dan Pertumbuhan Bibit Cabai Rawit (*Capsicum frutescens* L.)** (The Effect of Concentration of Shallot Extract and Soaking Time to Increase Vigor and Growth of Chilli Pepper Seedlings (*Capsicum frutescens* L.))  
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***ABSTRACT***

*One way to improve the quality of seeds that have experienced setbacks is to apply seed treatment in the form of invigoration. This study aims to determine the effect of shallot extract concentration and soaking time to increase the vigor and growth of chilli pepper seedlings. The research was conducted in the laboratory and field of the Jember State Polytechnic from September to December 2022. The study used a completely randomized design (CRD) and non-factorial randomized block design (RBD) with 4 replications. Data were analyzed using annova and continued with BNT levels of 5%. The factors used were shallot extract concentration and soaking time (KL). The KL factor consists of 8 levels, namely K0 (seeds not expired without shallot extract and soaking time), K1 (seeds expired without shallot extract and soaking time), K1L1 (15% shallot extract concentration and 6 hours of soaking time), K1L2 (shallot extract concentration 15% and soaking time 12 hours), K2L1 (shallot extract concentration 30% and soaking time 6 hours), K2L2 (shallot extract concentration 30% and soaking time 12 hours), K3L1 (shallot extract concentration 45% and soaking time 6 hours), K3L2 (shallot extract concentration 45% and soaking time 12 hours). The results showed that the concentration of shallot extract and soaking time significantly affected the parameters of germination, growth speed, growth uniformity, vigor index, plant height and number of leaves at 14 DAP. However, it had no significant effect on the parameters Mean Germination Time (MGT), stem diameter, plant fresh weight and plant dry weight.*

**Key word:** *chilli pepper, concentration of shallot extract and soaking time*