

Pengaruh *Osmoconditioning* KNO₃ dan Lama Perendaman Terhadap Viabilitas dan Vigor Benih Cabai (*Capsicum annuum* L.) Kadaluaarsa.
(Influence Of KNO₃ Osmoconditioning and Long Immersion On Viability and Vigor Of Chili (Capsicum annum L) expired)
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ABSTRACT

Osmoconditioning using KNO₃ and long immersion of seed treatments before planting which aims to improve the vigor and viability of chili (Capsicum annum L) which has power low grow. To determine the effect of KNO₃ concentration and soaking time on increase viability and vigor of expired chili seeds. The study was conducted on October - November 2018 in the Laboratory of Seed Production of Jember Polytechnic Greenhouses, Jember Regency, East Java. The study used Factorial Complete Randomized Design with 2 factors and 3 replications. The first factor was concentration KNO₃ with of 4 levels, there were K₀ = 0%, K₁ = 1%, K₂ = 2% and K₃ = 3%. The second factor was immersion time consists of 3 levels, there were is L₁ = 6 hours, L₂ = 12 hours and L₃ = 18 hours. The results of the study shows that concentration of KNO₃ and the immersion has significant effect on the simultaneity of growth and root length. The highest germination was is K₂L₂ = 79.25%, the highest growth rate is K₂L₂ = 13.64% / etmal, the highest growth simultaneity is K₂L₂ = 79.0%, the highest plant height is K₂L₂ = 5.19 cm, the highest root length is K₂L₂ = 5 , 33 cm, and the highest number of leaves is K₂L₂ = 5.10.

Key words : *concentration of KNO₃, duration of immersion, chili*