

Peningkatan Mutu Fisiologis dan Produksi Dua Varietas Benih Jagung (*Zea mays L.*) dengan Metode Priming. Improvement of Physiological Quality and Production of Two Varieties of Corn Seed (*Zea mays L.*) by Priming Method.
Advisor: Dwi Rahmawati

Anang Suprayogi
Seed Production Technique Study Program
Agricultural Production Department

ABSTRACT

Maize is utilized by Indonesian people for food, animal feed, etc. The main factor of maize production is availability of seeds, so that seed production should be done at the same growing season on the previous year. Therefore, the seed must in storage. The deterioration of seed caused by storage conditions and post-harvest processing mistakes. So it is necessary to improve the physiological quality of maize seeds by using priming method with ascorbic acid in two varieties of maize which is stored for 2 years. This research was conducted on Juny till November 2017 at Kemirian - Tamanan – Bondowoso. This research is used Randomize Block Design with 2 factors and 4 repetation. The first factor is concentration of ascorbic acid (A) 25 mM, 40 mM, 40 mM, 55 mM, 70 mM. The second factor is 2 varieties of maize (K) Lamuru variety and Lagaligo variety. The result release that, ascorbic acid treatment can improve the quality of seed maize but it was non significant for all the ascorbic acid concentration levels. Whereas, between 2 varieties which is stored for 2 years, Lagalilo variety is better then Lamuru variety and it is significant on viability (Lamuru 36,94% dan Lagaligo 91,13%), growth simultaneity (Lamuru 8,71%/etmal dan Lagaligo 25,52%/etmal), and growth rate (Lamuru 36,31% dan Lagaligo 90,87%) and also height in vegetative (Lamuru 121,81 cm dan Lagaligo 153,35 cm) and generative phase(Lamuru 206,02 cm dan Lagaligo 228,46 cm).

Keywords : *Physiological quality, ascorbic acid, seed variety.*