

## ABSTRACT

**Farida, Umi. 2012. Effect of Location of Seed At Panicles Against the Quality Seeds At various Age of harvest Sorghum (*Sorghum bicolor* L.).** Thesis Department of Biology, Faculty of Science and Technology, State Islamic University (UIN) Maulana Malik Ibrahim Malang.

Mentors I : Suyono, M.P

Mentors II : Dr. H. Munirul Abidin, M.Ag

**Keywords:** Panicles, Seed, Sorghum (*Sorghum bicolor* L.), Harvest

Sorghum is the most appropriate choice of plants to support government efforts to achieve national food security through diversity of food. Sorghum flowers that do not mature simultaneously on a single panicle is expected to be an obstacle in providing high quality seeds. Flower at the end of panicles will mature earlier than the middle and base of the flower panicles. The phenomenon of flower that not mature at the same time is interesting to be studied in order to compare the development of quality seeds from different positions at different ages of harvest. From this study can be known whether the seeds are located at different positions on the panicle have a different physiological quality of every age harvesting.

The research was carried out in two stages, that are planting sorghum that located in farms in the Sub District Loceret Nganjuk Regency, later laboratory tests performed at the Laboratory of Ecology Department of Biology Faculty of Science and Technology of the State Islamic University (UIN) Maulana Malik Ibrahim Malang from February to May 2012. The design of the study is a Completely Randomized Design (CRD) with a single factor, namely the location of seeds on a panicle that consisting of the tip, middle, and base. Each treatment was repeated three times as many observations include testing the water content, dry weight, germination, and vigor. Observations made from age 65 to 105 HST HST at intervals of 5 days.

Data obtained from studies in the analysis with analysis of variance to determine differences between treatments. If there are differences in the results of the analysis used up LSD test (Least Significant Difference) with a confidence level of 5% ( $\alpha = 0.05$ ). The results showed that sorghum seeds derived from the position of the tip, middle, and base of the panicle reached physiologically ripe almost simultaneously at the age of 90 HST is characterized by the moisture content reaches the range of 25-29%. Seeds derived from the panicle tip higher than the physiological quality of seeds from the middle and base of the panicle.