

ABSTRACT

Kurnianingsih, Nurlita. 2012. **Effect of Temperature and Water Against Old Soaking In Rain Ki Seed Germination.** Thesis. Department of Biology Faculty of Science and Technology of the State Islamic University of Maulana Malik Ibrahim Malang.

Promotor : (I) Dr.. Eko Budi Minarno, M. Pd.
(II) Achmad Nashichuddin, M. A.

Samanea saman or Rain Tree is a tree that is useful as an urban forest plants, as the tree water uptake for the balance of the ecosystem and as a medicinal plant. But the problems encountered in the seed breeding is a long time and a low germination percentage below 36%. For further research was conducted, to determine the effect of temperature, length of immersion, and interaction of temperature and long soaking on seed germination Rain Tree (*Samanea saman*).

The research was conducted at the Laboratory of Biology UIN Malang in December 2011-January 2012. An experimental study with a completely randomized design (CRD) factorial with two factors and three replications. Temperature by a factor I levels 30°C, 40°C, 50°C, and 60°C, factor II includes the level of immersion time 4 hours, 6 hours, 8 hours, and 10 hours. The data obtained were analyzed using (ANAVA) two-lane, proceed further test of Duncan Distance Test (DMRT) was significant 5%.

Results showed no effect of temperature on germination rate Resources and sprouts, but no effect on the length hipokotil. The most effective where the temperature is 60°C. Meanwhile, the Old Power Soaking had no effect on germination, germination rate and length of hipokotil. The interaction of temperature and immersion time affects only the Power sprouts, but had no effect on germination rate and length hipokotil.

Key words: Temperature, Long Soaking, Germination Rain Tree (*Samanea saman*).