

ABSTRACT

Lestari, Alinda Dwi. 2012. NaCl Salt Stress Test the Germination Some Varieties Sesame (*Sesamum Indicum* L.). Supervisor: Evika Sandi Savitri, M.P, Religious Advisor: Dr. Munirul Abidin, M.Ag.

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Sesame plants have a comparative advantage due to drought resistant, and has a relatively high economic value. Currently advantage sesame plants received great attention because of its use are very good for health. In 1977-1987, Indonesia is known as an exporter of sesame seeds, but in 1988 changed Indonesia position of the exporting country to the importing country. One obstacle is the cultivation of sesame salt stress, so we need varieties that are tolerant to salt stress. In acquiring varieties tolerant to salt stress evaluation sesame varieties in the collection are available in Balittas.

Salt is one of the existing environmental stresses in plants, especially in the phase of germination of sesame. The purpose of this study was to determine the effect of concentration of salt (NaCl) on the germination of seeds of different sesame (*Sesamum indicum* L.).

The research was conducted in the laboratory of UIN Malang in June-July 2012. The study design used was completely randomized design (CRD) 2 factors and 3 replications. The first factor is the concentration of salt (M0, M1, M2, M3, M4). For the 2nd factor is the range of varieties of sesame Sumberrejo 1, Sumberrejo 2, Sumberrejo 3, Sumberrejo 4). Data obtained from the study analyzed the variance, and to find a combination of treatments is used Duncan's Multiple Range Test (DMRT) at 5% level.

The results showed that there are varieties that are tolerant to salt stress (NaCl), which varieties: Sumberrejo 2 to variable length observations sesame roots with root length at Sumberrejo 2: 3.12 cm, at Sumberrejo 1: 2.76 cm, the Sumberrejo 3 : 2.71 cm, and the Sumberrejo 4: 2.747 cm.