Analisis Pengaruh Salinitas (NaCl) Terhadap Pertumbuhan dan Mutu Benih Beberapa Varietas Tanaman Padi (*Oryza sativa* L.), *Analysis Effect Salinity Stress (NaCl) Against Growth and Seed Quality Several Varieties of Rice Plants (Oryza sativa L.)*. Supervisor: Dr. Ir. Nurul Sjamsijah, M.P.

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ABSTRACT

The development of salinity tolerant rice varieties is one of the strategis that can be used to increase the productivity of food crops on saline land. This study aims to determine the rice plant varieties that are tolerant to salinity. This research was conducted from August 2022 to January 2023 on the drying floor of the State Polytechnic of Jember. This research uses Non Factorial Randomized Block Design with 1 factor and 3 replications. Varieties treatment used were Inpari 32 HDB (V1), Ciherang (V2), IR64 (V3), Logawa (V4), Situ bagendit (V5), Mentik Wangi (V6). The Results of the research analysis show that the qualitative a. The level of plant tolerance showed that 5 varieties, namely the Inpari 32 variety (V1), Ciherang variety (V2), IR64 variety (V3), Situ Bagendit variety (V5), Mentik Wangi variety (V6) were classified as varieties that were tolerant to salinity treatment, Logawa variety (V4) is somewhat tolerant of soil conditions stressed by salinity (NaCl). While the quantiative characteristics showed that the various treatment varieties gave significantly different results on the parameters of plant height aged 45 days after planting number of tillers, weight of 1000 grains, germination power and simultaneity of growth and gave highly significant different results on the parameters of plant height at 30 days after planting, plant height at 60 days after planting, flowering age, harvest age, panicle leght, number of productive tillers, number of grain of panicle, number of rice grains, production of hectare, growth rate. The Ciherang (V2) Variety is significantly different from the three varieties, which has an advantage in production of hectare, while the IR64 (V3) variety also has advantages in germination, growth speed, and growing synchrony, so that these two varieties have a great opportunity to be into varieties that are tolerant to salinity stress (NaCl).

Key words: *Growth and seed quality, Rice Varieties, Salinity Stress (NaCl).*