

***Comparison of The use of Nitrogen (N) Sources in Various Application Times
on Shoot Formation and Padi Ratun Production***
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ABSTRACT

Ratoon system is a rice culture method through tiller cultivation after stem cutting. The advantage of ratoon syestem is that it harvest faster than conventional method. The one of nutrient that plays the important role in ratoon rice cultivation is nitrogen because it will tiller growth and rice yield. This study was conducted for 4 months starting from April to July 2020 in Tegalgede, Jember. The experimental design was arranged in split plot that consisted of application time and source of nitrogen fertilizer and repeated 6 times. Nitrogen source treatment consisted of urea and amonimum sulfate, while the application time consisted of three levels namely two days before harvest, during harvest, and two days after harvest. The results showed that the use of urea had a best effect on the number of shoots and the number of leaves while amonium sulfate had a best effect on the plant height, tassel length, number of grain per tassel, the number of dry harvest grain per tassel. Therefore, ammonium sulfate was the best nitrogen source for the growth and production of ratoon rice. Meanwhile, the best application time of fertilizer was at harvest because nutrients were absorbed by plant roots optimally.

Keywords: *Nitrogen, Padi ratun, Urea, Amonium sulfate*