

ABSTRACT

This study was conducted to determine the effect of *Bacillus* sp. and NPK fertiliser on P nutrient uptake, soil chemical properties, and production rice field (*Oryza sativa*) varieties/strains SHS W5 and Rojolele Srinar. This research was conducted in the rice field (*Oryza sativa*) Sukamandi, Subang, West Java from August to December 2022. Research design used nested design with 3 replications. First factor was the variety/strain of rice (*Oryza sativa*), which are SHS W5 and Rojolele Srinar. Second factor was the application of *Bacillus* sp. and NPK fertiliser nested in the first factor, so there were 6 experimental plots. Results showed that addition of *Bacillus* sp. and NPK fertiliser increased soil N-total, soil P-available, and soil K-available. Rice field (*Oryza sativa*) production results showed that Rojolele Srinar variety/strain had higher yield compared to SHS W5 variety/strain. However, the level of nutrient uptake of rice plants (*Oryza sativa*) Rojolele Srinar variety/strain is smaller than SHS W5 variety/strain.

Keywords: Ultisol, Rice Plant (*Oryza sativa*), *Bacillus* sp., P uptake.