

**STATUS OF NPK NUTRIENT IN AGRICULTURAL LAND WITH  
DIFFERENT PLANTING PATTERN IN SEYEGAN SUBDISTRICT,  
SLEMAN REGENCY**

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**ABSTRACT**

Kapanewon Seyegan has considerable agricultural potential with a diversity of planting patterns. The variety of planting patterns can affect the levels of Nitrogen (N), Phosphorus (P), and Potassium (K) in the soil. N, P, and K nutrients were included as macronutrients that play an essential role in plant growth. This study aims to determine the effect of crop rotation on levels of N, P, and K. This research was conducted in Kapanewon Seyegan, Sleman Regency. The method used in this study was the survey method. Determination of observation locations using purposive methods based on planting patterns of rice- rice- rice, rice-rice-palawija, rice- rice- horticulture, and horticulture- horticulture- horticulture. Soil samples of planting patterns were collected compositely from 5 points at each observation location. After sampling, soil was analyzed in the laboratory with parameters pH, organic- C, Total- N, Available- P, and Available- K. The results of this study showed that the planting pattern of rice- rice- rice has an average pH of 5,5, Organic- C 2,45%, Total- N 0,33%, Available- P 123,89 ppm, and Available- K 1,01 me%. In the planting pattern of rice- rice- palawija average pH 5,1, Organic- C 0,76%, Total- N 0,15%, Available- P 92,79 ppm, and Available- K 1,13 me%. In the planting pattern of rice- rice- horticulture the average pH is 5,2, Organic- C 1,24%, Total- N 0,19%, Available- P 97,02 ppm, and Available- K 1,49 me%. The horticulture- horticulture- horticulture planting pattern has an average pH of 5,8, Organic- C 0,85%, Total- N 0,11%, Available- P 90,23 ppm, and Available- K 1,37 me%.

***Keywords:*** *NPK, planting pattern, nutrient*