

ABSTRACT

The main problem of dry land is the low organic matter content, which is due to slow decomposition by soil microbes that are inhibited by drought, thus reducing the capacity for water and nutrient retention. This study aimed to determine the status of soil nitrogen, phosphorus, and potassium in dryland areas of Bener Meriah Regency. This study was conducted in Bener Meriah Regency. The study was conducted from January to April 2026. A descriptive survey method was employed in this study. Soil sampling was conducted based on Land Mapping Units (LMU), resulting in a total of 10 soil samples. Soil samples were collected using an auger from the soil surface to a depth of 30 cm. The soil parameters analyzed in the laboratory were total nitrogen, available phosphorus and exchangeable potassium. The data obtained from the analyses of total nitrogen, available phosphorus, exchangeable potassium and were subsequently evaluated to determine their nutrient status based. The status of total nitrogen ranged from low to moderate, with values between 0.11%-0.32%. (LMU 3 and LMU 8). The status of available P nutrients is classified as very low to low, with a value range of 1.44-7.35 ppm (LMU 12 and LMU 1). The added K nutrient status was classified as low to moderate, with values ranging from 0.22-0.51 me/100 g of soil (LMU 1 and LMU 3).

Keywords : Land map unit, soil fertility, soil chemical properties