

ABSTRACT

Pineapple (*Ananas comosus* (L) Merr.) is one of the fruit plants widely cultivated in Indonesia. In designing fertilizer recommendations, there are several basic considerations used, one of which is planting age. The purpose of study was to determine the levels of nitrogen, phosphorus and potassium in the soil at various ages of pineapple plants in Pegasing subdistrict. This research used a survey method consisting of four stages, namely the preparation stage, preliminary survey, main survey, data analysis and presentation of results. Soil sampling using a drill at a depth of 0-30 cm, soil samples were taken at plant ages of 0-1 year, 1-3 years, 3-5 years and 5-7 years, at each plant age 3 soil sample were taken randomly to be analyzed of total-N, available-P, and soil exchangeable-K. The results of soil analysis on pineapple plantation land according to plant age in Pegasing subdistrict, Central Aceh Regency, total-N at age 0-1 year 0.24-0.38% (medium), 1-3 years 0.25-0.40% (medium), 3-5 years 0.29-0.48% (medium), 5-7 years 0.27-0.41% (medium). P_2O_5 -available at age 0-1 year 2.05-6.37 ppm (very low-low), 1-3 years 2.28-10.02 ppm (very low- medium), 3-5 years 3.87-11.38 ppm (very low-high), 5-7 years 2.05-10.47 ppm (very low- medium). exchangeable-K at age 0-1 year 0.33-0.50 me/100g (low-medium), 1-3 years 0.30-0.53 me/100g (low-medium), 3-5 years 0.32-0.49me/100g (low-medium), 5-7 years 0.31-0.47 me/100g (low-medium). The fertilizer recommendation for pineapple plants in Pegasing subdistrict at the age of 0-1 year can be used (Urea 159.42 kg/ha, SP-36 67.54 kg/ha), age 1-3 years (Urea 42.31 kg/ha, SP-36 28.53 kg/ha), age 3-5 years (Urea 65.2 kg/ha, SP-36 32.81 kg/ha) and at the age of 5-7 years (Urea 44.93 kg/ha, SP-36 41.28 kg/ha,) and for KCl fertilizer it has met the needs. Providing fertilizer in the appropriate dosage for pineapple plants will certainly have an effect on increasing production results.

Keywords: Fertilizer, Nutrition, Soil fertility