

Factors That Influence The Productivity and Rendemen of Sugarcane at Farmer Group “Rosan Lestari” in Sleman regency. This research is supervised by Agus Santosa and Indah Widowati. The aims of this research are to: (1) analyze the influence of characteristic of land, expended labour time, ZA fertilizer, Phonska fertilizer, seed and pesticide to sugarcane’s productivity. (2) Analyze the influence of plant period, variety of the cane, ZA fertilizer, Phonska fertilizer, frequency of klenthekan, the deep of gutter, age of ratoon, pesticide and climate to rendemen of sugarcane. Research method that used is survey method. Determining the location method that used is case study method. Taking respondent method that used is cencus method. Kinds of data include the primary data and secondary data. Data collection method that used is observation method, interview, and recording. The result of the research are: (1) The characteristic of land, expended labour time, ZA fertilizer, Phonska fertilizer, seed and pesticide have influence in collective to sugarcane’s productivity. Whereas the characteristic of land, Phonska fertilizer, seed and pesticide have influence in partial to sugarcane’s productivity. (2) The plant period, variety of the cane, ZA fertilizer, Phonska fertilizer, frequency of klenthekan, the deep of gutter, age of ratoon, pesticide and climate have influence in collective to rendemen of sugarcane. Whereas the plant period, variety of the cane, frequency of klenthekan, the deep of gutter, age of ratoon, and climate have influence in partial to rendemen of sugarcane.

Keywords: sugarcane, productivity, rendemen, Sleman.