

# EFFECT OF SOIL QUALITY ON NUTRIENT COMPOSITION OF BRACHIARIA HYBRID MULATO II GRASS GROWN IN HIGHLANDS OF WEST JAVA INDONESIA

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## Abstract

*Mulato grass species have been introduced to the farmer in Indonesia due to their ability to provide feed for ruminant with high quality and biomass. However geographical, climatic, and soil quality (texture and properties) and management determined the quality of the grass or vice versa. Fertilizer and spacing were also affected the production of mulato. This study aimed to characterize and evaluate soil texture and properties and nutritive values of mulato grass grown in highlands Indonesia. This research was carried out in two different sites /location in Pangalengan, West Java, Indonesia. The sites that explored have different in the fertilizer and spacing of the grass (Pangalenga A and Pangalengan B). This research covered the characterization of geographical, climatic, and soil texture and characteristics/properties of those two sites, and tried to associate those characteristics into nutritive values of Mulato grass. Purposive sampling sample were used in this study and the data were descriptive interpreted. Results showed Pangalengan B site with high amount of fertilizer and shorter broadcast linear spacing had higher soil properties. However Pangalengan A site had better nutrient composition of mulato grass due to better this site received more solar radiation. In conclusion, beside soil properties and environment condition, soil texture and solar radiation will determine the nutritive composition of mulato grass.*

**Key words:** *Soil quality, Mulato grass, Nutrient composition, Forage. Environment*