ABSTRACT

The Potency of Ruminant Development Based On Soil Condition, Productivity and Nutrition Quality of Range in Nagekeo, Flores Island, NTT

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Nagekeo regency located in Flores Island, Nusa Tenggara Timur have a lot of natural resources suitable for ruminant development. This field research aimed to know range potential for ruminant development based on soil condition, productivity and nutrition quality and give comparative analysis from nine villages as experiment location in Nagekeo regency of Nusa Tenggara Timur. Soil sample and grass sample which taken from the pasture of every village and then to be analyzed. Soil analyzed consists of texture, pH, organic matter, and cationic exchange capacity. Grass sample was analyzed of botany composition, moisture, ash, crude protein, ether extract, crude fiber, Total Digestible Nutrient (TDN), Dry Matter Digestibility (DMD), Organic Matter Digestibility (OMD), NH₃ production, and VFA production. Based on soil condition, nutrition value and carrying capacity from dry matter availability is found that Renduwawo village have the highest score than another village. However, based on calculation increasing of population capacity show that Natatoto village have the highest number than another village.

Key words: Ruminant, range, productivity, nutrient quality