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Research article

Evaluation of Yield Production and Chemical Composition of Three Types of Forage Legumes at Different Cutting Intervals and Cutting Times to Assess Their Benefits as Ruminant Animal Feed

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Abstract The purpose of this study was to evaluate the potential of yield production and chemical composition response to cutting intervals of three forage legumes over a 5 month period of the dry season in Sa Kaeo province for use as an alternative forage for farmers. The experiment was conducted in a factorial arrangement in randomized complete block design. The first factor was the types of forage legumes, including alfalfa, hamata and stylo 'Tha pra' and the second factor was the cutting intervals at 30, 45, 60 and 75 days. The results for stylo 'Tha pra' showed that the average height, total weight per area, fresh weight (FW) and dry weight (DW) per plant were the highest ($P < 0.001$). The cutting interval at 75 days provided the highest average height, FW and DW in all legume forage types. The FW and DW increased with increases in the cutting times (number of cuts) at all cutting intervals for all three forage legume types. The three different types of forage legumes and the different cutting intervals resulted in different chemical compositions ($P < 0.001$) except for dry matter (DM) for which there was only a difference from the cutting interval. Each chemical composition showed an unequal response to the increase in cutting times.

Keywords: Chemical composition, Cutting intervals, Cutting times, Forage legumes, Ruminant feed, Yield production

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