KUALITAS SILASE RUMPUT GAMA UMAMI (*Pennisetum purpureum* cv. Gama Umami) YANG DISUPLEMENTASI DAUN KALIANDRA (*Calliandra calothyrsus*) DENGAN PENAMBAHAN *POLLARD*

INTISARI

Penelitian ini bertujuan untuk mengetahui berbagai level suplementasi leguminosa yang optimal dalam pembuatan silase rumput gama umami yang disuplementasi kaliandra dan aditif *pollard*. Penelitian ini menggunakan Rancangan Acak Lengkap dengan 4 macam perlakuan P0: Rumput GU 95% + kaliandra 5%; P1: Rumput GU 90% + daun Kaliandra 10% + *pollard* 2,5%; P2: Rumput GU 80% + daun Kaliandra 20% + *pollard* 5%; P3 : Rumput GU 70% + daun Kaliandra 30% + *pollard* 7,5%. Dengan ulangan sebanyak 5 replikasi, lama pemeraman pada silase dilakukan selama 21 hari. Rumput gama umami dicacah menggunakan *chopping machine* dengan ukuran yang seragam 3 – 5 cm. Rumput gajah dan leguminosa yang akan dijadikan silase dilayukan dengan cara diangin-anginkan, ditebarkan di tempat yang kering dan teduh hingga sedikit kering, kemudian dilakukan pencampuran bahan dan dikemas dalam silo plastik berukuran 2 kg untuk difermentasi selama 21 hari. Data yang diperoleh meliputi nilai pH, kualitas fisik (warna, aroma, tekstur dan keberadaan jamur) dan komposisi kimia silase Bahan Kering (BK), Bahan Organik (BO), Protein Kasar (PK), Serat Kasar (SK), Lemak Kasar (LK), VFA, NH_3 dan karakteristik fermentasi secara *in vitro*. Hasil penelitian menunjukkan bahwa perlakuan suplementasi kaliandra dan aditif *pollard* pada silase rumput gama umami tidak mempengaruhi nilai pH ($P>0,05$). Kualitas fisik menunjukkan bahwa perlakuan P3 (Rumput GU 70% + daun Kaliandra 30% + *pollard* 7,5%) memberikan nilai kualitas fisik paling baik. Perlakuan suplementasi kaliandra dan aditif *pollard* menunjukkan peningkatan nilai komposisi kimia silase. Dari penelitian ini, dapat disimpulkan bahwa suplementasi kaliandra dan aditif *pollard* memberikan dampak pada peningkatan kualitas fisik dan nilai BK, PK, dan LK silase gama umami dengan imbangan terbaik pada perlakuan 3 (Rumput GU 70% + daun Kaliandra 30% + *pollard* 7,5%).

(Kata Kunci: Kaliandra, Kualitas Silase, *Pollard*, Rumput Gama Umami, Silase).

SILAGE QUALITY OF GAMA UMAMI GRASS (*Pennisetum purpureum* cv. GU) SUPPLEMENTED BY CALLIANDRA (*Calliandra calothyrsus*) LEAVES WITH ADDED *POLLARD*

ABSTRACT

This research was conducted to investigate the supplementation level of legume and pollard which optimum in made gama umami grass silage which was supplemented with legume and pollard. This study used a completely randomized design with 4 types of treatments, they were P0: GU grass 95% + calliandra 5%; P1: GU grass 90% + Calliandra leaves 10% + pollard 2,5% ; P2: GU grass 80% + Calliandra leaves 20% + pollard 5%; P3: GU grass 70% + Calliandra leaves 30% + pollard 7,5%. Each treatment was replicated 5 times. Gama umami grass were chopped by chopping machine with a uniform size of 3-5 cm. Gama umami grass and legumes that will be used as a silage were subjected to the withering process by aerating them by scattering them in a dry and shady place until the DM decreases, then mixing the materials and packed in 2 kg plastic silos to be fermentes for 21 days. The data obtained of pH value, physical quality (color, odor, texture and fungi) and chemical composition of silage Dry Matter (DM), Organic Matter (OM), Crude Protein (CP), Crude Fiber (CF), Extract Ether (EE), VFA, NH_3, and in vitro fermentation characteristics. The results showed that the pH of the supplementation of calliandra and pollard additives in gama umami grass silage did not affect the value of pH (P>0,05). P3 showed the best physical quality value, and increases the value of chemical composition in silage. From this study, it can be concluded that the supplementation of calliandra and pollard as addivites had an impact on increasing the physical quality and value of DM, CP, and EE of gama umami silage with the best proportion in treatment 3 (70% GU grass + 30% calliandra leaves + 7,5% pollard).

(Key Words: Calliandra, Gama Umami Grass, Pollard, Silage, Silage Quality).