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ENSILED FRUIT PEELS OF PINEAPPLE *(Ananas comosus)* AND PAPAYA *(Carica papaya)* AS AN ANIMAL FEED

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A silage has been prepared using pineapple *(Ananas comosus)* and papaya *(Carica papaya)* fruit peels obtained from a fruit processing factory in Sri Lanka. Ensiling was done either fruit peels only or in different combinations of fruit peels and chopped Hybrid Napier (CO-3 *Pennisetum perpureum* × *Pennisetum americarnum*) grass. The experimental design was Completely Randomized Design having ten treatments (T1 to T10) with two replicates per each. The treatments were T1 Papaya 100%, T2 Pineapple 100%, T3 Grass 100 %, T4 Pineapple 75%+ Papaya 25%, T5 Pineapple 50%+ Papaya 50%, T6 Pineapple 25%+ Papaya 75%, T7 Pineapple 20%+Papaya 70%+ Grass 10%, T8 Pineapple 30%+ Papaya 50%+ Grass 20%, T9 Pineapple 70%+ Papaya 20%+ Grass 10%, and T10 Pineapple 50%+ Papaya 30%+ Grass 20%. The fruit peels and grass were dried under shade, chopped and mixed according to the different treatments. After 21days, representative silage samples from each treatment were analyzed for nutrient content, colour, odour, pH and Ammonium Nitrogen (NH3N) content. The colour of all silages ranged from olive green to orange. All the treatments had a fruity smell. The pH values ranged from 3.41 to 4.04 in all treatments. The highest *($p<0.05$)* crude protein (CP) content was in T3 and lowest *($p<0.05$)* was observed in T4 and T5. The highest *($p<0.05$)* acid detergent fiber (ADF) contents were in T3, T8, and T10 and lowest *($p<0.05$)* was in T5 and T6. The highest *($p<0.05$)* neutral detergent fiber (NDF) content was in T9 (44.00±0.02%) and the lowest *($p<0.05$)* in T2. The NH3N content was not present in any treatments. Based on CP, ADF and NDF contents T1, T7, T8, T9, and T10 were selected for further studies with animals to select the best treatment.

Keywords: Ammonium Nitrogen (NH3N), ensiled fruit peels, nutrient content, physical characteristics