

# The study of pangolagrass pasture improvement <sup>(1)</sup>

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## Abstract

The objective of this study was to determine the efficacy of improving methods for perennial pangolagrass (*Digitaria decumbens* Stent.) pasture grown more than 10 years. The different cultured methods including discontinued and continued improvement will test on next year. The efficient of recovering the forage yield, quality and soil fertility was evaluated after different treatments i. e., control (CK), organic fertilizer (800 kg/ha) with rotary cultivator (OFRC), rotary cultivator 1,600 rpm (RC), soybean (*Glycine max*) (80 kg/ha) with rotary cultivator (SRC) and sun hemp (*Crotalaria juncea* L.) (40 kg/ha) with rotary cultivator (SHRC). Experiment field was designed with randomized completely block design (RCBD) and three repetitions. The results showed that the plant chemical contents of SRC or SHRC have higher crude protein than other treatments. Soil contents of treatments were not significantly different among all treatments. The yields of SRC treatment of discontinued improvement produced the highest forage yield of total seven harvests were 54.89 ton/ha among all treatments and followed by SHRC treatment was 54.05 ton/ha. The highest net income was NT\$146,592 on SRC among all treatments of discontinued improvement. SHRC treatment had highest yield 54.81 ton/ha among all treatments on continued treatment, but the highest net income was 147,616 of CK treatment. Considering the net income, it might be suggested farmers employ the SRC treatment to pangolagrass pasture improvement.

Key words: Pangolagrass pasture, Improvement, Legume.

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