
THE EFFECT OF *in-situ* GROWN *Pueraria phaseoloides* ON NUTRIENT STATUS OF COCONUT-GROWN SOILS AND COCONUT YIELD IN LOW COUNTRY WET ZONE OF SRI LANKA

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Despite the promise of organic manures in enhancing/maintaining fertility and productivity of soils devoted for perennial crops like coconuts, its adoption by farmers is low mainly due to their lack of availability in required quantities. *In-situ* cultivation and incorporation of green manure crops is increasingly being considered as a viable alternative for *ex-situ* organic manure. This study analyses the effect of *in-situ* grown *Pueraria phaseoloides* on nutrient status of coconut-grown soils and on coconut yield in low country Wet Zone of Sri Lanka. The treatments were without *Pueraria* cover with recommended inorganic fertilizer application to coconut palms, growing *Pueraria* with recommended inorganic fertilizer application to coconut palms and growing *Pueraria* without nitrogen fertilizer application to coconut palms. The nitrogen, phosphorous and potassium content in the soil where *Pueraria* was grown was significantly higher than in soil without *Pueraria* cover irrespective of the nitrogen fertilizer application. Higher organic matter content, cation exchange capacity, water holding capacity and ideal soil pH for the growth of coconut palm were observed in *Pueraria* grown soil. The results revealed that the *in-situ* cultivation and application of *Pueraria* positively affected coconut yield.