



# Effect of time of introduction of mucuna (*Mucuna cochinchinensis* (Lour) A. Chev.) in cassava (*Manihot esculenta* Crantz.) on weed management in Makurdi, Southern Guinea Savannah of Nigeria.

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**Key Words:** Mucuna, Cassava, Population, yield

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## 1 ABSTRACT

Afield experiment was conducted in 2013/2014 to 2014/2015 to investigate the effect of time of introduction of Mucuna (*Mucuna cochinchinensis* (Lour.) A.Chev.), on weed suppression and yield of cassava (*Manihot esculenta* Crantz) in an intercropping system at different planting dates. The cover crop (mucuna) was introduced at 3, 6, 9 and 12 weeks after planting (WAP) cassava in the subplots with sole cassava as control. The main crop (cassava) consisted of two plant populations 10,000 and 14,925.37 plants /ha. Results showed that mucuna introduced 3WAP gave the highest percentage weed suppression of 85.75% and 89.50% for 2013/2014 and 87.50% and 94.25% in 2014/2015. Followed by 6weeks after planting cassava with 70.25% and 72.75% in 2013/2014 and 64.25% to 70.75% in 2014/2015. The intense competition that gave significantly lower weed densities with mucuna introduced at 3weeks after planting cassava did not translate to an increase in tuber yield. Tuber yield values of 17.53 t/ha and 14.32 t/ha for both years were obtained in the population of 10,000 plants/ha when mucuna was introduced 6weeks after planting cassava. For both years, sole cassava population of 10,000 plants/ha with no mucuna introduced had the least yield values of 2.48t/ha and 1.83tonnes/ha for two cropping seasons. The present study therefore recommends that *Mucuna cochinchinensis* could be intercropped in a cassava population of 10,000 plants ha<sup>-1</sup> at 6 weeks after planting cassava for a good yield and avoidance of weeding regimes.

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