Summary

The purpose of this experiment was to study the effects of different levels of calcium on development of *Stylosanthes guianensis* (Aubl.) Sw. cv. Cook in green matter production, using the following treatments: T1 (200 mg of calcium/liter), T2 (133.33 mg of calcium/liter), T3 (66.66 mg of calcium/liter), and T4 (without calcium). The experiment was conducted in hydroponic culture, using Hoagland and Arnon no. 1 solution, and in a greenhouse. A randomized complete block design with subdivided plots was used for the five harvests made, with 14-day intervals as plots and the treatments as subplots. Each treatment had three replications with two plants.

The results suggested that a treatment with a calcium concentration of up to 133.33 mg of calcium/liter, was effective in increasing green matter production of stylo plants.