SUMMARY

Effect of two green manures and urea, in the establishment of California Palm *Washingtonia filifera* (Linden) H. Wendl.

Leguminous used as cover plants have been usefull to control weeds, increase economic profits and improve environmental conditions. However, there has been little work around this important alternative for ornamentals production, specially for palms. These plants are very sensitive to inapropiate nutrimental conditions, specially when nutrients are insufficient or incorrectly used. Although, in a general way, nitrogen requirements in palms are low, its deficiency results in a reduction in growth and pale green leaves. In Mexico, some fast growing tropical leguminous are used to add nitrogen to soil, to prevent extreme temperature changes and to impaire weed growth. Among these species, it has been reported that *Canavalia ensiformis* (L.) DC. and *Cajanus cajal* L. (Millsp.) produce benefic effects on diverse crops, and as secondary stratum, they restor soils, and because its atmospheric nitrogen fixing capacity, they contibute as an important nitrogen providers to soil. For this reason, the aim of this work was to evaluate *Washingtonia filifera* (Linden) H. Wendl. response to urea aplication and to the intercrop of *Cajanus cajan* and *Canavalia ensiformis* used as green manures. A randomized block design with five treatments was used. *Wasinghtonia filifera* was the control, treatment 2 consisted of the intercrop of *C. ensiformis* used as green manure, treatment 3 was the intercrop of *C. cajan* used as green manure, treatment 4 consisted on a monthly fertilization of each plant with 15 g of urea (starting one month after planting *W. filifera*) and treatment 5 combined *W. filifera* with the intercrop of *C. ensiformis* and *C. cajan* at the same time. Monthly evaluations for stem height, plant height, stem diameter, leaf width and leaf lenght were made and the results were analized as repeated measures and compared using Tukey´s multiple range test. The highest treatment was the control, statisticaly equal to the intercrop of *W. filifera* with *C. ensiformis* and in some cases with *C. cajan*, this could be due to *W. filifera* efficient use for nitrogen and to the long time response for green manure use. Because of this, in the conditios of the present study, we recomend to establish *W. filifera* plantations witout the aplication of urea nor the use of *C. ensiformis* or *C. cajan* intercroped.

Key words: *Canavalia ensiformis*, *Cajanus cajan*, fertilization