

STUDY OF THE DURATION OF WEED COMPETITION AND TIME OF PLANTING PEANUT INTERCROPPED WITH SUGARCANE

Third Place, Crop and Soil Science
Section, Student Category

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The research was conducted to determine the (1) best time of planting peanuts relative to the time of planting sugarcane, (2) degree of weed control due to peanut on between sugarcane rows, and (3) critical period of weed competition in peanut, intercropped with sugarcane.

The experimental treatments were laid out in a split plot design, replicated three times with components assigned as for a randomized complete block design. The time of planting peanuts after sugarcane, i.e. 0, 3, 6 and 9 days after planting sugarcane, was the main plots and the duration of weed competition after the peanuts emerged, i.e. 2 and 4 weeks, was the subjects. Weeded and unweeded plots were provided as controls.

The peanut plants in plots planted 3, 6, and 9 days after planting sugarcane were taller than those planted right after cane. On the

other hand, sugarcane plants with intercropped peanuts planted 9 days after planting the sugar were significantly taller than those with intercropped peanuts planted 6, 3 and 0 days after sugarcane planting.

Four weeks after emergence, peanuts on the unweeded plots and those allowed to compete with weeds for 4 weeks after emergence were significantly taller than those on the weed-free plots and those allowed to compete with weeds for 2 weeks after emergence. At harvest peanut plants on the unweeded plots were taller and produced less number of pods.

Planting peanut right after and 3 days after sugarcane yielded more than those planted 6 and 9 days after the planting of sugarcane. The yield of peanuts allowed to compete with weeds for 2 and 4 weeks after emergence was comparable to the yield from the weed-free plots but significantly higher than the yield from the unweeded plots.