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WEED CONTROL IN SUGARCANE WITH VARIOUS HERBICIDE COMBINATIONS

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Field experiments were carried out to determine the effectiveness of four herbicides, used either alone or in combinations, for weed control in a plant and a first ratoon crop of sugarcane (*Saccharum officinarum*, L.) at the Bacita Estate. Similar results were obtained in both the plant and ratoon crops. Pendimethalin (N-(1-ethylpropyl)-3-4-dimethyl-2, 6-dinitrobenzeamine) + atrazine (2-chloro-4 (ethylamino)-6-(isopropylamino)-1,3,5- triazine) applied pre-emergence at the rate of 3.5 + 6.0 kg a.i./ha gave the best weed control and increased tonnage. When asulam (Methylsulfanilyl carbamate) was substituted for atraine and used in combination with pendimethalin at the rate of 1.12 + 0.7 kg a.i./ha, there was no significant difference in crop yield over the hand weeded control. However, simazine (2-chloro-4, 6-bi (ethylamino)-s-triazine) applied alone at the rate of 6.0 kg a.i/ha gave a good result. Post emergence application of asulam at 4.5 and 6.0 kg a.i./ha caused initial toxicity, but the injury sustained did not significantly affect crop yield. Similarly, when atrazine (6.0 kg. a.i./ha) and pendimethalin (4.5 kg a.i./ha) were applied alone, there was no significant increase in crop yield over the no weeding control. No significant differences in juice quality were obtained between the different treatments.