

Weed control in soybean and its related problems

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119 -SUMMARY Four experiments were carried out at the Agricultural Research and Experiment Station, Faculty of Agriculture at Moshtohor, Kalubia Governorate, during 1979 and 1980 seasons to investigate the effect of some herbicides as a single or in combinations under different cultural methods of planting. In addition to study the influence of the competition of weeds on the growth and soybean yield as well as the protein and oil content, Calland cultivar was used, the soil in which the experiments were undertaken was silt clay textured, with a pH value of 7.8 and 1.58% organic matter content. Experiment I: This experiment included 30 treatments which were the using of 13 herbicides (single or combinations), beside the hoeing and control (un-weeded) treatments under two methods of planting (hand and machine). These treatments arranged in split plot design with four replications. The two methods of planting arranged in the main plots, whereas the weed control treatments in the subplots. The 13 herbicide treatments were: (Rate/ha): alifon (linuron) 1.0 kg.; amex (butralin) 2.0 L.; ronster (oxadiazon) 2.0 L.; Sencor (metribuzin) 0.5 kg.; enide (difenidol) 1.5 kg.; tridex (trifluralin-bladex) 1.0 L.; dicotex (phenisopham) 1.0 L. and mixtures of linuron with the other herbicides by using half rate of that of the individual herbicide. The herbicidal combinations were more effective in controlling weeds than any single herbicide and it showed good effects on most growth characters studied at the early, moderate and late stage of soybean plant. 4. Linuron, tridex, phenisopham and mixtures of linuron with butralin or tridex or phenisopham were equally similar to hoeing in controlling broad-leaved weeds, while the worst treatments in controlling broad-leaved weeds were butralin, oxadiazon and difenidol.