

YIELD AND YIELD COMPONENTS OF SEED COTTON AS AFFECTED BY DIFFERENT WEED CONTROLS

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ABSTRACT

Weeds are major constraint to seed-cotton production in Pakistan. Hence, their economic control is dire need of the day. So, a study comprising eight different methods of weed control in cotton was conducted at Regional Agricultural Research Institute, Bahawalpur during 1987-1989. Encouraging results were achieved showing that yield losses in cotton could economically be minimized through cultural practice on small scale and through chemicals on large scale basis. Cost-benefit was worked out which revealed as 1:9:74 (maximum) in cultural practice and 1:6:6 in case of chemical use respectively.

INTRODUCTION

Due to increase of inputs like fertilizers, insecticide, herbicides etc, the net profit of grower has been adversely affected. So it is imperative to adopt such measure by which the cost of production may be reduced without affecting the yield and quality of cotton. Weeds are serious menace. They are major constraint of crop production in world and especially in Pakistan for cotton crop. Weeds compete with crop mainly for light, nutrients, water, space and CO₂. Anderson (1983) Chaudhry (1982) reported that chemical weed control significantly increased the cotton yield. Patel *et al.* (1985) found that ronstar + diuran and 4 hand weeding gave the highest and similar seed cotton yield but herbicides the highest return.

Nalamwar and Wagh (1985) concluded that the application of herbicides gave as well as the cultivator practices increased seed-cotton yield significantly over control. Shelke *et al.* (1985) reported that the highest seed-cotton yield in the weed free plot was significantly superior to weed control fluchloraline (0.60t/ha and dicuran 1.0t/ha. Singh (1983) stated that better weed control and higher yields were obtained with hoeing than with herbicides. Solome (1982) observed that weeds cause the greatest damage to cotton crop during first two months of its growth. Present study was undertaken to compare and evaluate the integrated weed management.