

Critical period of weed control in cotton in Muzarabani- The Zambezi valley

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A field trial was conducted in Muzarabani to determine the critical period of weed interference in cotton in 2000-2001 and 2001-2002 seasons. There was an increase in the cotton yield, boll mass and plant height as the period of weed competition was reduced. In 2000-2001 season in the treatments that were kept weed free and then weedy throughout the season the highest cotton yield (2527 kg ha⁻¹) was obtained in the treatment that was kept weed free throughout the season and the lowest (524 kg ha⁻¹) in the treatment that was weed free for 2 weeks after crop emergence and then weedy rest of the season. The highest cotton seed yield (2727 kg ha⁻¹) for the treatments that were kept weedy and then weed free for the rest of the season was obtained in the treatments that were kept weedy for 2 weeks after crop emergence and the weed free for the rest of the season while the lowest yield (432 kg ha⁻¹) was obtained in the treatment that was kept weedy throughout the season for 2 weeks after crop emergence. To avoid significant yield loss farmers in Muzarabani need to begin weeding cotton at east 2 weeks after crop emergence leaving weeds beyond 2 weeks will result in a significantly drop in yield and additional weeding will be required up to 11 weeks after crop emergence, in order to attain maximum yields in a dry season. The critical period for a wet season was observed to be between 3 weeks after crop emergence up to 8 weeks after crop emergence, weeding thereafter will not result in any significant yield increase, according to results in 2001-2002 season.