

ECONOMICALLY SUITABLE ROW PATTERN FOR COTTON INTERCROPPING UNDER *VERTISOLS* OF CHHATTISGARH

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Abstract: An experiment was conducted under *Vertisols* of Chhattisgarh during rainy season of 2008-2009 to study of economically profitable crops in different combination of cotton intercropping. The experiment was laid out in randomized block design with three replications. The results revealed that, the growth characters of cotton like- plant height, number of branches, dry matter accumulation were the highest with sole cotton. The green bolls per plant in cotton were the highest under sole cotton. Sole cotton resulted in maximum seed cotton and stalk yield as compared to other treatments. However, cotton + soybean (1:1) and (2:2) and cotton + coriander (1:1) recorded the highest plant height, Dry matter accumulation, leaf area index and crop yield at different stages of crop growth period at 30 DAS, 60 DAS, 90 DAS, 120 DAS and at harvest stage excelled over sole cotton and other treatment combinations. The highest net income 52605.50 Rs. / ha and benefit ratio 2.70 was found in cotton + soybean (1:1) and followed by cotton + soybean (2:2).

Keyword: Cotton Intercropping, Row ratio, yield and Economics

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