

Effect of organic manures and bio-pesticides on cotton yield

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ABSTRACT : A field experiment was conducted for three consecutive *Kharif* seasons of 2005-06, 2006-07 and 2007-08 at All India Coordinated Cotton Improvement Project, Khandwa (M.P.) to evaluate the effect of organic manures and bio-pesticides on cotton production. The results revealed that except 2005-06, the treatment of recommended plant protection practices (IPM) recorded significantly higher mean yield of 1353 kg seed cotton yield per hectare over the treatment of bio-pesticides (organic plant protection) used for plant protection (1120 kg/ha). The increase in yield was to the tune of 233 kg/ha. The yield attributing characters were also affected in the same manner. Among the various nutrient management treatments, application of recommended dose of NPK alone (120:60:40kg/h) recorded highest (1493 kg/h) average yield of seed cotton closely followed by application of 50% RDF+FYM 10 t/ha (1406kg/h). It is interesting to note that application of FYM or Vermi-compost alone or in combination with NPK enhanced number of bolls/plant and there by seed cotton yield per hectare over control (977 kg/ha) and also over application of crop residue alone @ 5 t/ha (1068 kg/ha) and recommended dose of phosphorus alone @ 60 kg/ha (1122 kg/ha).

Key Words: Organic manure, vermi-compost, bio-pesticide, cotton yield.