Impact of different nutrient management practices on productivity and economics of soybean-wheat cropping system at farmers’ field in Tikamgarh district of Madhya Pradesh


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ABSTRACT: Field experiment was conducted during two consecutive years of 2007-08 and 2008-09 to study the impact of nutrient management practices on productivity and economics of soybean-wheat cropping system at farmers’ field in different blocks of Tikamgarh district of Madhya Pradesh. The application of full recommended dose of fertilizers (RDF) through chemical fertilizers + chemical weed control (T3) exhibited higher grain yield of soybean and wheat followed by T2 (50% through chemical fertilizers + 50% through FYM + chemical weed control) and T1 (farmers’ practices) during both the years of study as well as from pooled results. Pooled data on yield revealed that treatment T3 increased the yield of soybean and wheat by 36.2% and 21.0%, respectively over farmer’s practice (T1). Per day productivity and mean wheat equivalent yield of the soybean-wheat system was also higher under T3 treatment. Pooled data indicated that application of full RDF through chemical fertilizers + chemical weed control (T3) gave 39.3% and 14.8% higher net return over T1 and T2 treatments, respectively. Mean net return per rupee invested (B:C) was higher (1.49) when crops were fertilized with full RDF through chemical fertilizers + chemical weed control (T3) followed by T2 (1.34) and the lowest (1.19) was recorded under farmers’ practices. When crops were fertilized with full RDF through chemical fertilizers + chemical weed control (T3) followed by T2 (1.34) and the lowest (1.19) was recorded under farmers’ practices.

Key Words: Cropping system, net return, nutrient management, soybean, wheat, wheat equivalent yield.