

Response of potato to ash as an alternative source of potassic fertilizer

ABSTRACT

An experiment was carried out during rabi season of 2011-2012 in the experimental field of Soil Science, Bangladesh Agricultural University (BAU), Mymensingh. The objectives of present research work was to evaluate ash as an alternative source of potassic fertilizer for potato cultivation. The treatment combinations were i) Control (No K), ii) 100% K of recommended dose from muriate of potash (MoP), iii) 75% K from MoP+ 25% K from ash, iv) 50% K from MoP + 50% K from ash, v) 25% K from MoP + 75% K from ash, and vi) 100% K from ash. The result of the experiment indicated that various combinations of ash and MoP influenced the yield, yield contributing characters (length of the tubers, breadth of the tubers, number of tubers per hill, weight of tubers per hill, weight of ten tubers and gross yield of tubers per plot), K content of potato as well as weed infestation. Among the treatments the highest yield was obtained from 50% K from MoP + 50% from ash (T3) treated plot. The K content in the potato tuber and weed infestation was also highest for that plot. Considering the yield contributing parameters, yield and number of weeds the T3 (50% K from MoP + 50% K from ash) treatment was found more suitable than others.

Keyword: Ash; Potassic fertilizer; Alternative source; Potato yield; K content