

Yield Advantage Assessment of Sweet Corn Based Intercropping Systems Through Indices Under Irrigated Condition of Kashmir Valley

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Abstract: A field study to assess the yield advantage and economics of sweet corn-based intercropping systems under irrigated condition, was conducted on silty-clay loam soil at SKUAST-Kashmir, Wadura, Sopore during *Kharif* season of 2017. The experiment was in randomized block design with ten treatment combinations of row. The intercrops (bean or soybean) were grown in additive series with sweet corn as regular rows of 1:1 and paired rows of 2:1 and 2:2 including sole cropping of each crop. System productivity of intercropping system of sweet corn and intercrops in terms of corn equivalent yield was significantly higher with sweet corn + soybean (1:1). Yield advantage in terms of land equivalent ratio indicated that sweet corn + soybean (1:1) produced 55 % more yield compared to sole sweet corn followed by sweet corn + soybean (2:2). The maximum monetary advantage index, net returns and B:C ratio also obtained with sweet corn + soybean (1:1) system. In crux, amongst different cropping system, intercropping of sweet corn with soybean in regular rows of 1:1 was more biologically and economically viable intercropping system for irrigated silty- clay loam soil of Kashmir valley.

Keywords: Corn equivalent yield, Intercropping, Land equivalent ratio, Soybean and Sweet corn