

- III. **Agnihotri, Y., Agarwal, M.C. and Nirmal Kumar. 1996.** Relative efficiency of Latin Square Designs on natural grasslands of Shiwalik. *Range Mgmt. & Agroforestry*, 17(1):13-19.

Relative efficiency of various Latin Square Designs (LSDs) versus Complete Randomized Design (CRD) and Randomized Complete Block Designs (RCBDs) for various sizes and shapes of plots in natural grasslands of Shiwalik hills was worked out. The relative efficiency (%) of 3x3, 4x4, 5x5 and 6x6 LSD for different plot sizes and shapes was compared with CRD and RCBD, when rows are treated as blocks (ignoring column) and when columns are treated as blocks (ignoring rows). The number of units required in CRD and RCBD taking rows as blocks or columns as blocks for obtaining the relative efficiency equivalent to that of 3x3 to 6x6 LSD were also evaluated. Thus, LSD was found more efficient than CRD and RCBD for experimentation with natural grasslands in this region.