## Impact of spacing and fertilizer levels on maize yield (Zea mays L.) under teak based agroforestry system

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**ABSTRACT**: Study on impact of spacing and fertilizer level on maize yield (*Zea mays* L.) under teak based agroforestry system was carried out at the Department of Agroforestry Research Farm, Allahabad Agricultural Institute - Deemed University, Allahabad, during the Rabi season of 2006 - 07. The experiment was laid out in a Randomized Block Design (2x3 factorial) having six treatment combinations each replicated four times. Length of cob was recorded maximum in case of  $T_6$  (33.75 cm), maximum number of grains per cob was observed in treatment  $T_6$  (318.75), maximum thousand-grain weight was also recorded in treatment  $T_6$  (249.75 g), maximum grain yield was observed in treatment  $T_6$  (30.80 q/ha), maximum stover yield of maize was observed in treatment  $T_6$  (108.75 q/ha). Teak growth (height and diameter) was slightly increased with fertilizer application. This may be recommended to the rural farmers in Uttar Pradesh which can be economically and socially acceptable with profitable cultivation as advocated under teak based agroforestry system.

Key Words: Teak agro-forestry, Zea mays L., spacing, fertilizer level.