

## IMPACT OF PROTECTION ON THE DIVERSITY OF SHRUBS IN THE RAVINE OF OTTANGAN RIVER AT KHANDER, AGRA, U.P

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## ABSTRACT

Impact of protection on the diversity of shrub species in the ravine of protected and unprotected area of Ottangan River at Khander has been studied in two years on four topographies as top, slope, bottom & river bank comparatively and recorded that the number of species of shrubs in protected ravine was more in comparison of unprotected ravine. In protected ravine, 14 species of shrubs was noted whereas only 4 species noted from unprotected ravine which was comparatively reduced in form due to biotic interference. More dominant and successful species of the unprotected ravine was Capparis deciduas Forsk. Edgew. and Zizyphus nummularia (Burm.F.) Wt. & Arm. The value of Presence Constance and importance value index of the species which found in the unprotected ravine was high mostly in comparison of a protected ravine.

KEYWORDS: Protected Ravine, Unprotected Ravine, Topography, Ottangan, Khander