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Forest Floor Diversity, Distribution and Biomass Pattern of Oak and Chir-pine Forest in the Indian Western Himalaya

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Abstract: The present study envisage the dynamics of forest floor vegetation and biomass pattern in selected oak and chir-pine forest, western Himalaya an altitudinal ranged between 1450-1950 m. The herb species richness was slightly higher (26) in the oak forest as compared to the chir-pine (25) forest. Poaceae was the dominant family in both forests represent 5 species in each site. The herb layer density was higher (234.50 m^{-2}) in the oak forest as compared to the chir-pine forest (119.85 m^{-2}). Species diversity was recorded 3.29 in oak and 4.09 in the chir-pine forest and concentration of dominance was 0.16 in oak and 0.076 in the chir-pine forest stands. Most of the species in both the study sites were showing contagious distribution patterns. The forest floor biomass was515.52 gm^{-2} in the oak and 428.11 gm^{-2} in the chir pine stand during the study period (2017-2019). The rainy session account for maximum biomass in both the sites.

Keywords**:** Oak forest, Forest floor vegetation, Herbaceous biomass, Western Himalaya