

STRUCTURE AND PHENOLOGY OF AN ALPINE MEADOW AS AFFECTED BY NOMADIC GRAZING

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Abstract: Data were collected for structure and phenology of alpine grassland at Rudranath in Uttarakhand, India. A large number of species of the area are dwarf cushion herbs and most are distributed in mid alpine tract. A total of 21 and 16 species were recorded at control (S1) and grazed (S2) plot respectively. At control or ungrazed site maximum density (211.0 pl/m²) and basal cover (121.6 pl/m²) was recorded for *Danthonia cachaemymeriana* and for grazed plot maximum density (146.0 pl/m²) and basal cover (170.9 pl/m²) was for *Oxygraphis polypatela*. In most of the cases, the various species completes their life cycle within 4-5 months. Germination of various species starts during April-May with luxuriant vegetative growth. Majority of species bear flowers during July and August. Some species bear flowers during later part of June. Seed formation begins in later part of August and increase sharply up to September. Senescence at community level is gradual from September and increases quickly due to lower temperature. Thereafter different phenophases succeeded one after the other and completed their life history up to November.

Keywords: Phenophases, Phenology, Sprouting, Senescence, Vegetative

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