International Journal of Applied and Natural Sciences (IJANS)
ISSN (P): 2319–4014; ISSN (E): 2319–4022
Vol. 12, Issue 2, Jul–Dec 2023; 21–24

International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations

IMPACT OF CLIMATE CHANGE ON PHENOLOGICAL PATTERNS OF NATIVE PLANT SPECIES IN THE EASTERN HIMALAYAS

Dr. Subhash Machindra Samudra
Late.K.G.Kataria College, Daund, India

ABSTRACT

Climate change is profoundly altering the timing of seasonal events (phenology) in ecosystems across the globe. In the ecologically sensitive Eastern Himalayas, even slight shifts in temperature and precipitation are triggering significant changes in the life cycles of native flora. This study investigates how climate-induced alterations affect the phenology—specifically flowering and leafing of key native plant species in this region. Using data from field observations, local ecological knowledge, and satellite temperature records from 2010 to 2020, this research highlights early blooming trends in Rhododendron arboreum, Magnolia campbellii, and Primula denticulata. The study concludes that these phenological shifts are not merely biological anomalies but early warning signs of ecological imbalance, affecting pollinators, agriculture, and traditional livelihood systems.

***KEYWORDS**: Phenology, Eastern Himalayas, Climate Change, Native Flora, Rhododendron, Flowering Shift, Ecological Indicators, Alpine Ecosystems etc.*

Article History

***Received:** 23 Dec 2023 | **Revised:** 26 Dec 2023 | **Accepted:** 31 Dec 2023*