

PHYTOSOCIOLOGY AND NUTRIENTS ANALYSIS OF DOMINATED GRASSES OF PASTURELANDS IN KASHMIR VALLEY

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Abstract: The study was carried out at three altitudes viz., Arishan, Harkani and Deesu, which were selected on the basis of altitude and migratory grazing status in Daksum range of Anantnag Forest Division, Kashmir in the year 2014-15. Samples of dominant grass species were collected for their nutrient analysis at all three sites. Results revealed IVI of herbaceous species indicated that *Poa annua* (63.72) was dominant at lower altitude while *Fragaria nubicula* (75.66) and *Poa pratense* (77.10) dominates the upper altitude site respectively (Fig 02). The nutrient content of dominant grass species were recorded higher in all the three sites because the summer season is considered peak nutrient season for plant species. The highest nitrogen per cent was found in *Poa balbosa* (1.42%) at lower elevation, phosphorous per cent in *Cynodon dactylon* (0.41%) at middle elevation, Potassium per cent in *Poa annua* (0.74%) at lower elevation, calcium per cent and magnesium per cent in *Dactylis glomerata* (0.91%) and (0.99%) at lower elevation respectively (Table 01, 02 and 03). The IVI of herbaceous species indicated that *Poa annua* (63.72) was dominant at lower altitude while *Fragaria nubicula* (75.66) and *Poa pratense* (77.10) dominates the upper altitude site respectively (Fig 2).

Keywords: Phytosociology, Nutrients, Grasses, Nitrogen, Phosphorus, Calcium

REFERENCES

- Anonymous** (2011). <http://censusindia.gov>
- Bawa, R.** (1986). Structural and functional studies on three semi grassland communities near Shimla. Ph. D thesis H. P. University Shimla **437**: 245-248.
- Champion, H. G. and Seth, S. K.** (1968). A revised survey of the forest types of India. Govt. of India Publication, New Delhi.
- Cochran, W. G. and Cox, G. M.** (1968). Experimental designs. New York, John Wiley and Sons, London.
- Curtis, J. T. and McIntosh, R. P.** (1950). The interrelations of certain analytic and synthetic phytosociological characters. *Ecology***31**: 434-455.
- Gupta, B.** (1988). Structure, net primary productivity and nutrient cycling in grazed and ungrazed grassland ecosystem at Sharda ghat, Shimla (India). Ph. D. thesis H. P. University Shimla.
- Ismail, M. I. and Elawad, A. A.** (2015). Phytosociological analysis and species diversity of herbaceous layer in Rasshad and Alabassia localities, South Korodofan state, Sudan. *Jordan journal of Biological Sciences***8**(2) 151-157.
- Kukshal, S., Nautiyal, B. P., Anthwa, I. A., Sharma, A. and Bhatt, A. B.** (2006). Phytosociological investigation and life form pattern of grazing lands under pine canopy in temperate zone, Northwest Himalaya, India. *Research Journal of Botany***4**: 55-69.
- Sharma, D. D., Gill, R. S. and Negi, S. S.** (1967). Seasonal variation in chemical composition of some indigenous grasses of Kangra district. *Journal of Research PAU, Ludhiana* **5**(1): 81-87.
- White, R. P., Murray, S. and Rohweder, M.** (2000). Pilot Analysis of Global Ecosystems: Grassland Ecosystems. Washington D. C. World Resources Institute.

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