SEASONAL HERBS DIVERSITY AROUND DISTILLERY SPENTWASH DISCHARGE OF DISTRICT MEERUT (U.P.)

R.C. Arya* and Prashant Kumar

Department of Botany, Meerut College, Meerut (U.P.)-250002 Email: drramesharya@yahoo.com

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Abstract: The distillery spentwash contains a number of nutrients for plant growth but also heavy metals which became a serious concern for environment and human health after allowable concentration. The Importance Value Index of the species was estimated seasonally for each distillery spent wash discharge site. A total 57 species of herbaceous plants have been observed from three distilleries which belong to 28 families. Total species count was highest in rainy season and lowest in summer season although there is peak spent wash production in summer. The highest beta diversity was observed in winter season at central distillery while lowest at Daurala in summer season. The herbaceous vegetation showed a mosaic pattern which was more pronounced in rainy months than in summer and winter months. In conclusion, human population, climatic factors and concentration of industrial discharge influenced the species composition and diversity in these habitats.

Keywords: Beta diversity, Distillery spent wash, Importance Value Index, Species diversity, Species dominance.

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*Corresponding Author

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