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Aquatic plants as ecological indicators -status and indices of unhealthy sandy soil water bodies
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Abstract
Inorganic contaminants and eutrophication are typically associated with the profusion of invasive aquatic vegetation in freshwater. Such extensive problems concerning water bodies are triggered due to excess levels of phosphate (P), nitrogen (N), and heavy metals. Superfluous nutrient levels and toxic elements can create adverse environmental conditions, eutrophication, algal blooms, invasive growth of several aquatic plants, oxygen level depletion, and loss of important species, reducing the quality of several freshwater systems. Numerous physicochemical and biological indicators are used to gauge water quality. Such parameters must be understood and managed carefully to determine the origin and degree of pollution load. Hence, this research was conducted to understand the correlation between contamination levels and physicochemical indicators for water bodies with sandy soils and extensive aquatic plants. This research presents an important outcome concerning the loss or profusion of critical species that indicate heavy metal contamination or eutrophication, including concentrations leading to deteriorating sandy soil water body regulation and management. The following are desirable aspects concerning the conditions that must be used as indicators: preventative, measurable, integrative, and sensitive to human-caused stress or interference; however, they must have a predictable stress response and low flexibility reaction. © 2023 Nova Science Publishers, Inc.

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