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## Treatment of wastewater by vermifiltration integrated with macrophyte filter: A review

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### HIGHLIGHTS

- This study reviewed the mechanisms of vermifilter and vermifilter integrated macrophyte filter.
- Various limitations of vermifilter have been discussed.
- Recommendations for future research are given on improving sustainability and performance of integrated filter.
- Key affecting factors related to design and treatment processes have been identified.

### ABSTRACT

Vermifiltration is an economically affordable and environmentally sustainable technology for treatment of wastewater. However, the long-term effective performance and field scale application of this system still remains a challenge due to some structural and functional limitations. Therefore, the recent researches are being focused on integrating vermifilters with macrophyte filters for efficient treatment of wastewater, its steady operation and large scale applications. The present review describes the mechanism and the effectiveness of vermifiltration alone and in combination with macrophytes filter for removal of various

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