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Acid Blue 113 removal from aqueous solution using novel biosorbent based on NaOH treated and surfactant modified fallen leaves of *Prunus Dulcis*

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Highlights

- Biosorbent was synthesized by NaOH and surfactant treatment of dead leaves of *Prunus Dulcis*.
- Almost 100% dye removal for 100 mg L^{-1} of acid blue 113 was obtained for surfactant modified biosorbent.
- Maximum biosorption capacity was estimated as 97.09 mg g^{-1} for surfactant modified biosorbent.
- Regeneration studies for 3 cycles ensured potential of the synthesized biosorbent.
- Langmuir and Temkin isotherm models were in better agreement to the equilibrium data.