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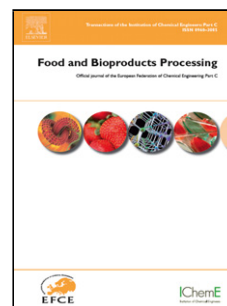
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Optimized microwave-assisted extraction of phenolic compounds from *Scirpus holoschoenus* and its antipseudomonal efficacy, alone or in combination with *Thymus fontanesii* essential oil and lactic acid.

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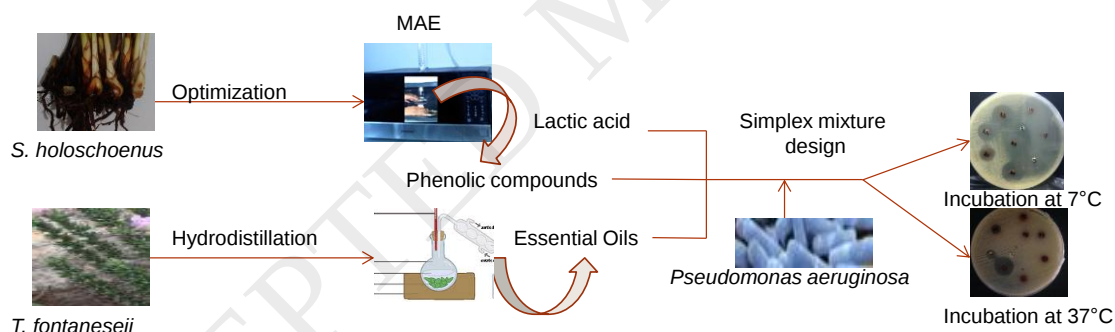
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Graphical abstract



Highlights

- Response surface methodology was used for microwave extraction of TPC from *S. holoschoenus*.
- The optimal extraction conditions were found to be 56% acetone, 600 w and 69 s.
- Only ethyl acetate fraction from the phenolic extract showed antipseudomonal effect.
- A mixture of ethyl acetate fraction and EO of *T. fontanesii* gave the highest activity.
- The antibacterial effect was most important at low temperature.

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