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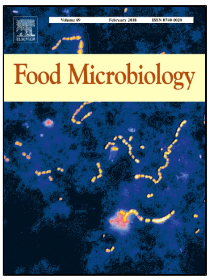

Influence of surface polysaccharides of *Escherichia coli* O157:H7 on plant defense response and survival of the human enteric pathogen on *Arabidopsis thaliana* and lettuce (*Lactuca sativa*)

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Highlights

- Surface polysaccharides of *E. coli* O157:H7 influenced survival ability on plants.
- Colanic acid and LPS contributed to survival/persistence on *Arabidopsis* and lettuce.
- Lower expression of *PR1* gene by wild-type *E. coli* O157:H7 led to greater survival.
- Capsular polysaccharide may play important roles in pathogen-plant interactions.
- Comparative study between *Arabidopsis* and lettuce showed a similar survival trend of *E. coli* O157:H7.