



Elena Poverenov

Biopolymers-based nanostructures to form active packages for food products

Food Quality and Safety Department
Agricultural Research Organization, The Volcani Center, Israel

COST FP₁₄₀₅

ACTIVE AND INTELLIGENT FIBRE-BASED PACKAGING – INNOVATION AND MARKET INTRODUCTION

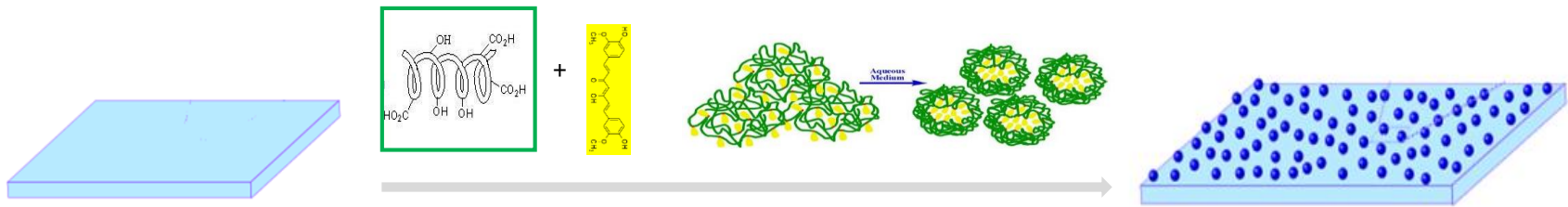


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Biopolymers-based nanostructures to form active packages

- Contact active biopolymer-based nanoparticles



- Stimuli responsive nano-vesicles from modified biopolymers

nano-vesicles

encapsulated active molecules

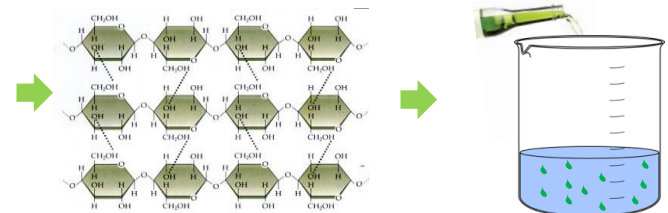
Dis-assembly of nano-vesicle

no nano-vesicles

released active molecules

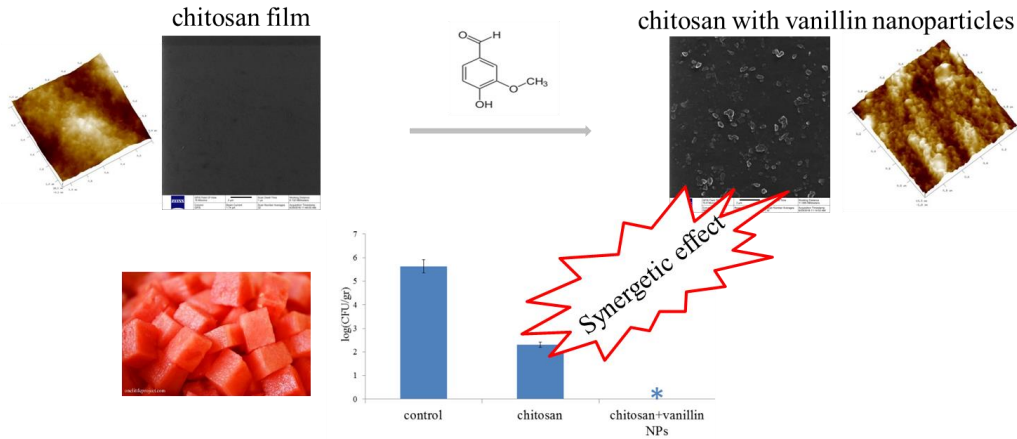
- Edible active packages (coatings)

- Layer by layer method
- Encapsulation of active agents

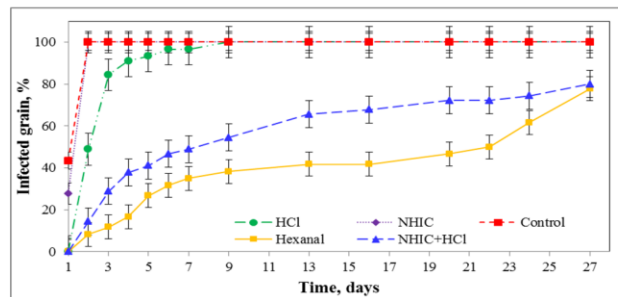
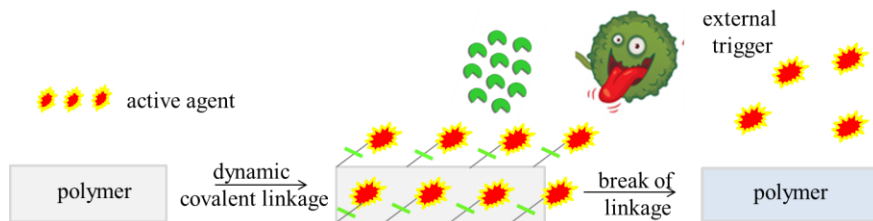


Our results

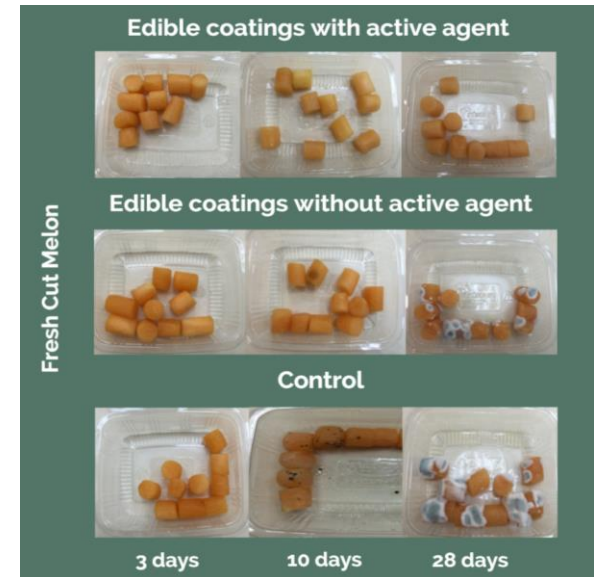
Contact active biopolymer-based nanoparticles



Stimuli responsive nano-vesicles from modified biopolymers



Edible active packages (coatings)



After 24 days at cold storage and 7 days of shelf storage



ACKNOWLEDGEMENT

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