

Supplementary material

Edible films from carrageenan/orange essential oil/trehalose – structure, optical properties, and antimicrobial activity

Jancikova Simona ^{1*}, Dordevic Dani¹, Sedlacek Petr², Nejezchlebova Marcela³, Tremel Jakub³ and Tremlova Bohuslava¹

¹ Department of Vegetable Foodstuffs Hygiene and Technology, Faculty of Veterinary Hygiene and Ecology, University of Veterinary and Pharmaceutical Sciences Brno, Palackeho tr. 1946/1, 612 42 Brno, Czech Republic; jancikovas@vfu.cz (S.J.); dordevicd@vfu.cz (D.D.); tremlovab@vfu.cz (B.T.)

² Faculty of Chemistry, Brno University of Technology, Purkynova 118, 612 00 Brno, Czech Republic

³ Department of Molecular Pharmacy, Faculty of Pharmacy, Masaryk University, Palackeho tr. 1946/1, 612 00 Brno, Czech Republic

* Correspondence: jancikovas@vfu.cz; Tel.: +420 774 607 936

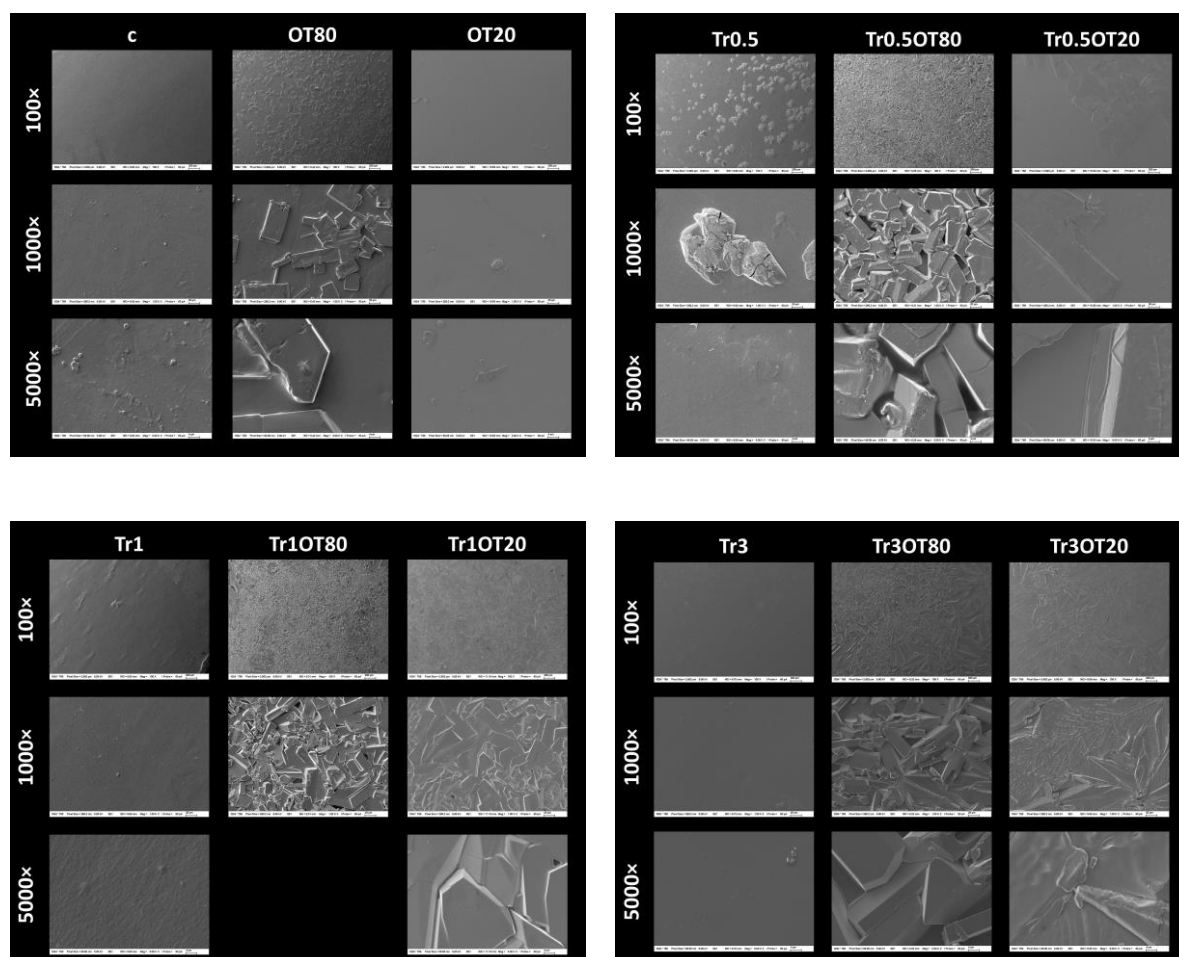


Figure S1: The appearance of films consisted of 0.5 g of κ -carrageenan

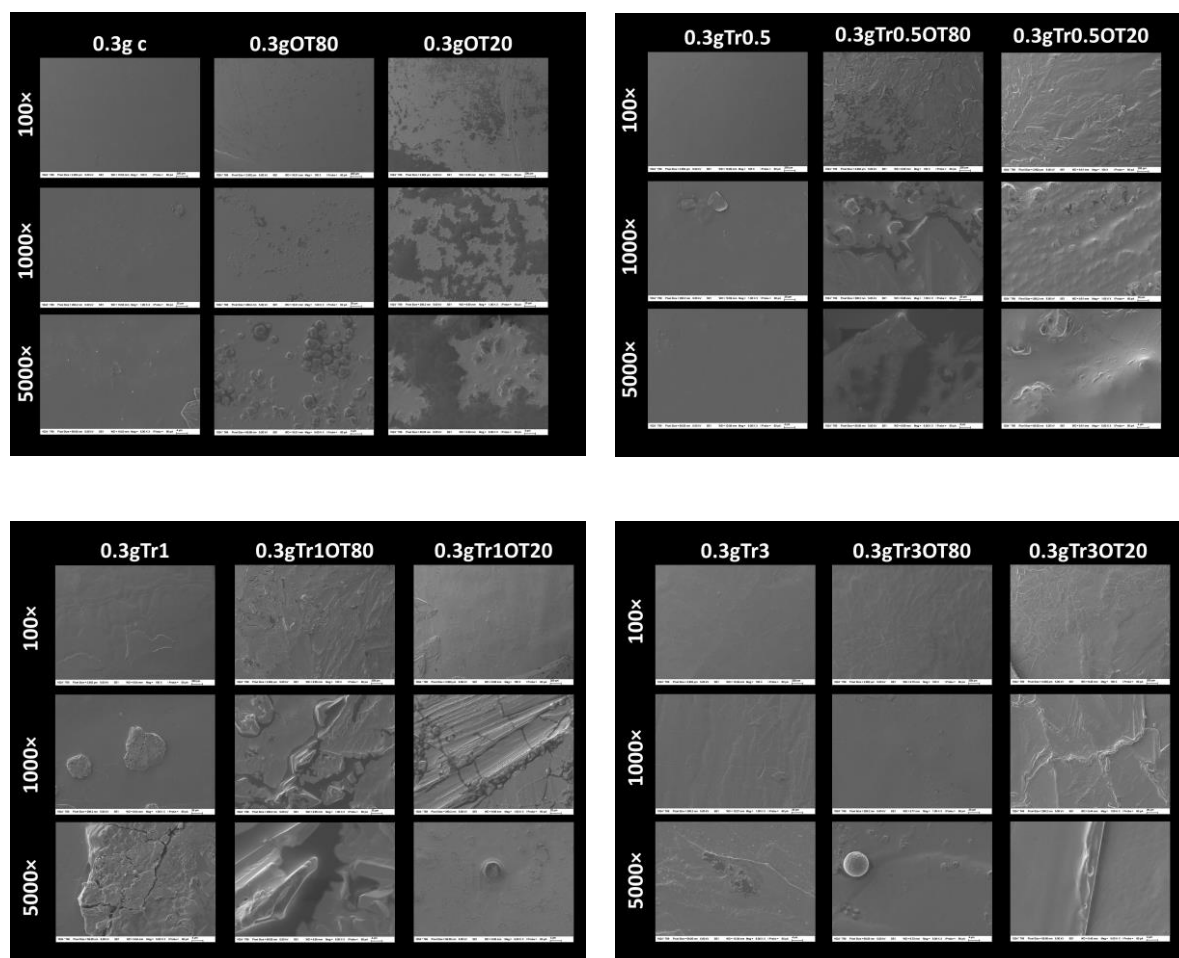


Figure S2. The appearance of films consisted of 0.3 g of κ-carrageenan

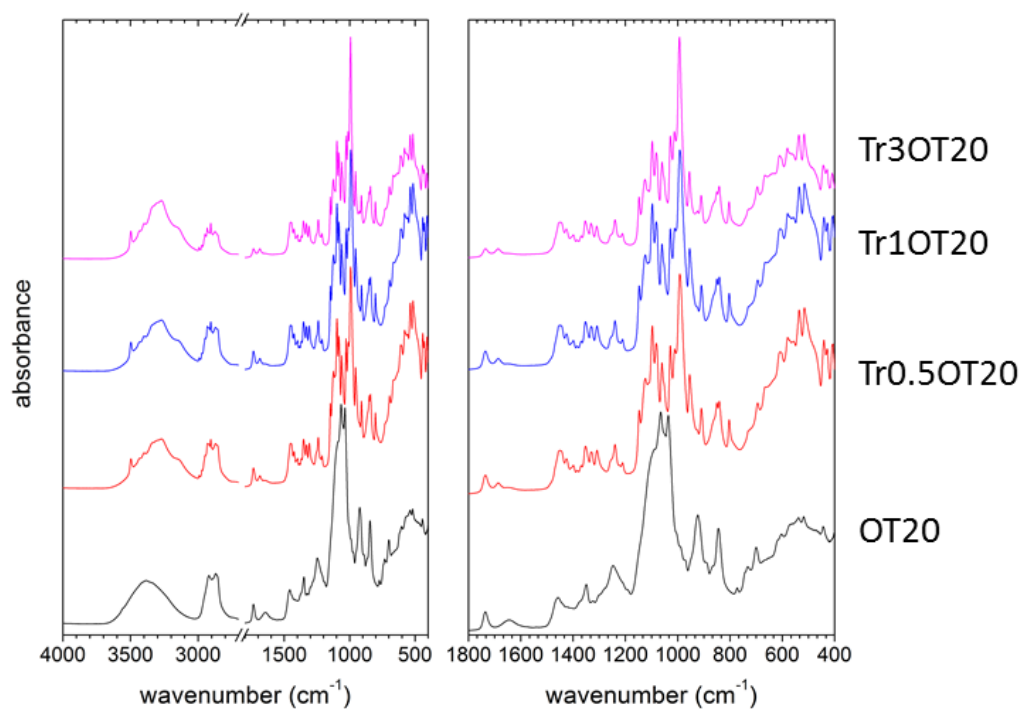


Figure S3. ATR FTIR spectra of the trehalose-containing carrageenan films with the addition of essential oil (0.5 g of carrageenan, Tween 20)

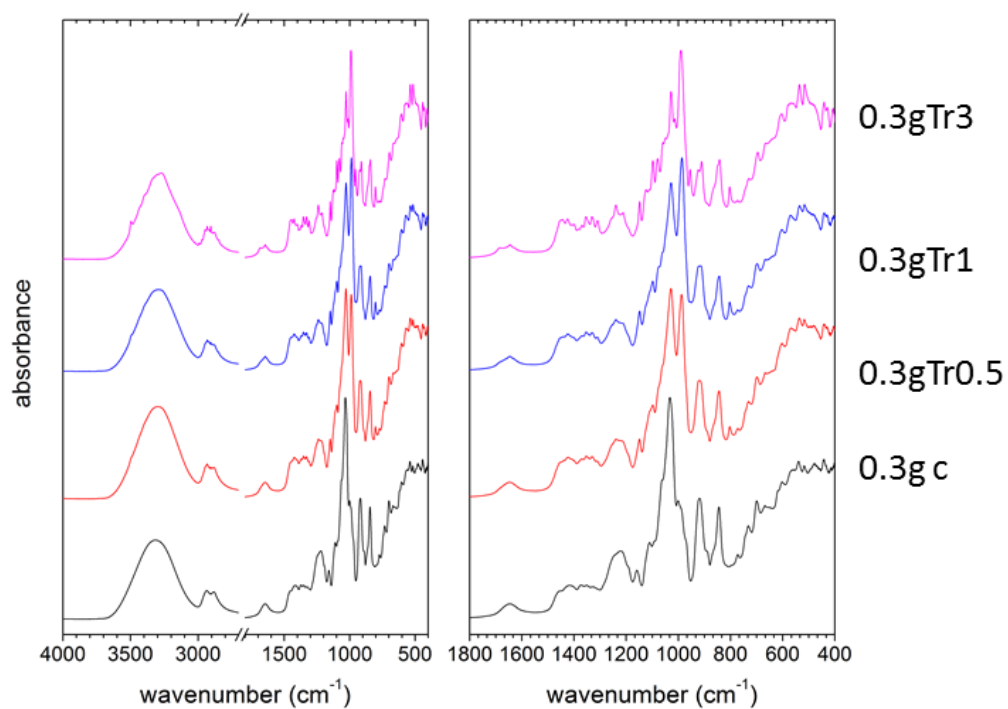


Figure S4. ATR FTIR spectra of the trehalose-containing carrageenan films without addition of essential oil (0.3 g of carrageenan)

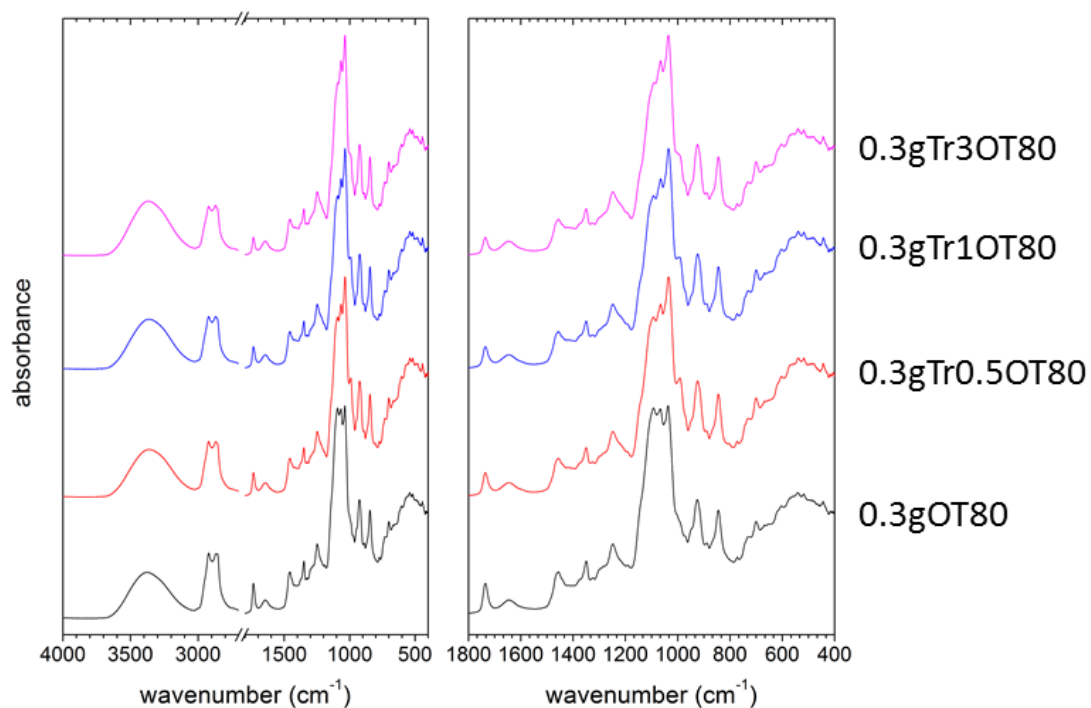


Figure S5. ATR FTIR spectra of the trehalose-containing carrageenan films with the addition of essential oil (0.3 g of carrageenan, Tween 80)

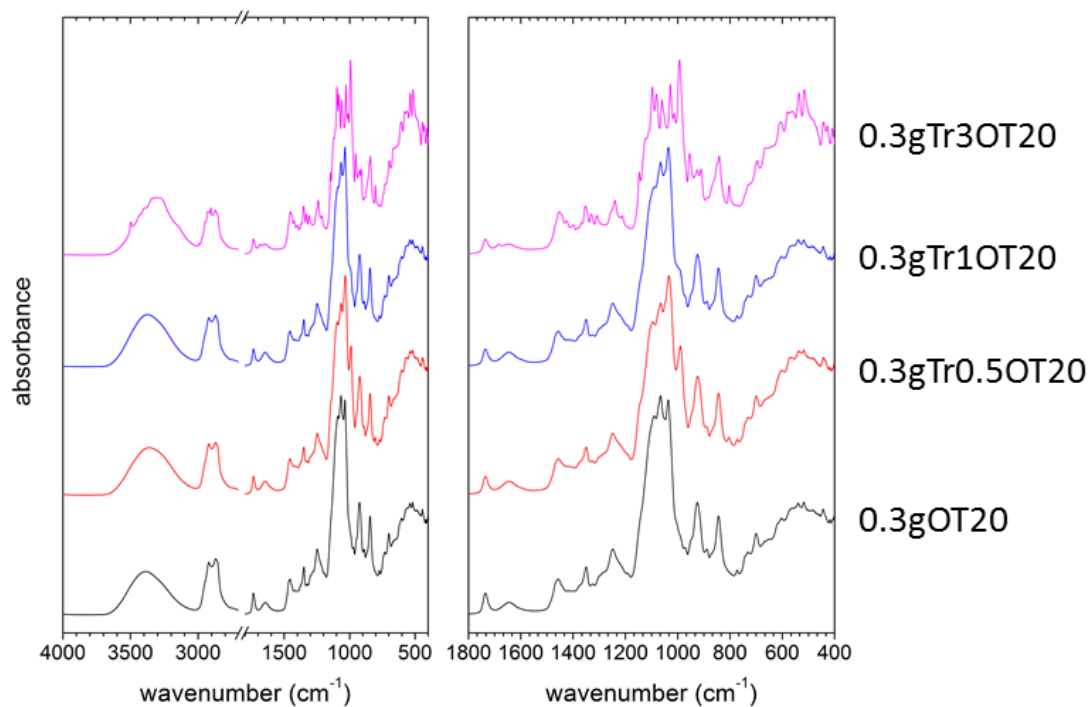


Figure S6. ATR FTIR spectra of the trehalose-containing carrageenan films with the addition of essential oil (0.3 g of carrageenan, Tween 20)

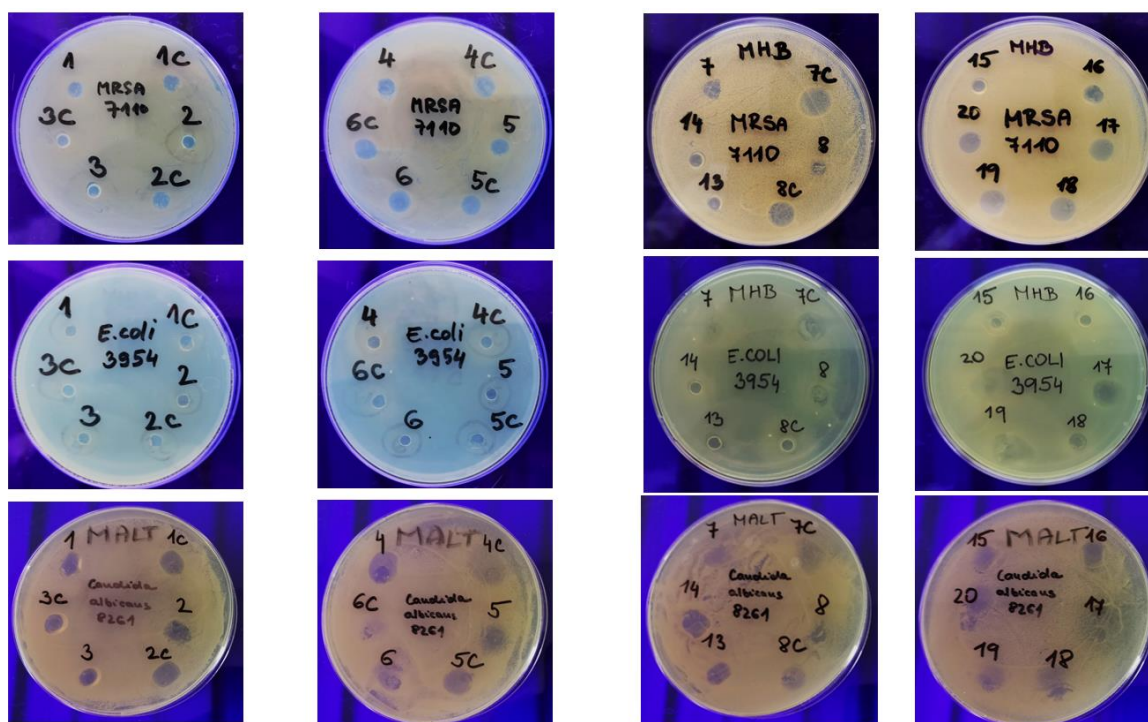


Figure S7. The complete results of antimicrobial activity of prepared films