**Inhibitory effect and mechanism of chitosan–Ag complex hydrogel on fungal disease in Grape**

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**Keywords:** silver, chitosan, hydrogel, antibacterial property, grape

**Figure S1.** The image of dominant pathogenic fungi isolated from grape.

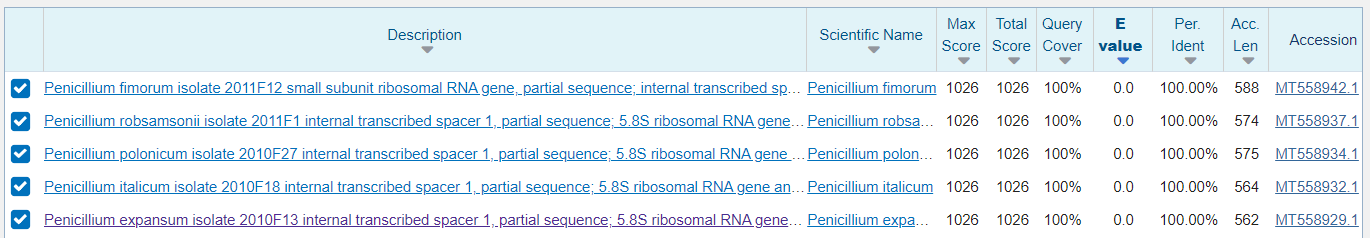
(a: *P. expansum*, b: *A. niger* and c: *B. cinerea*.)

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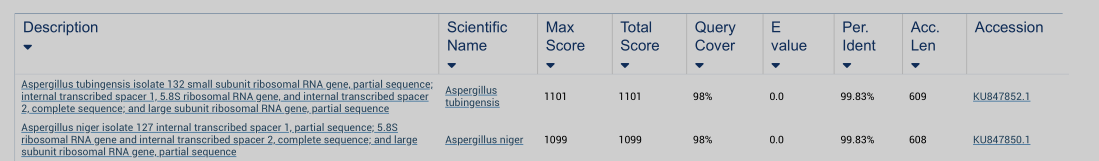


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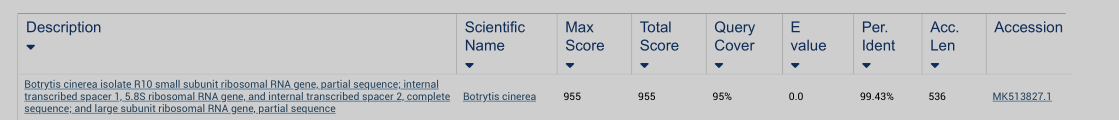


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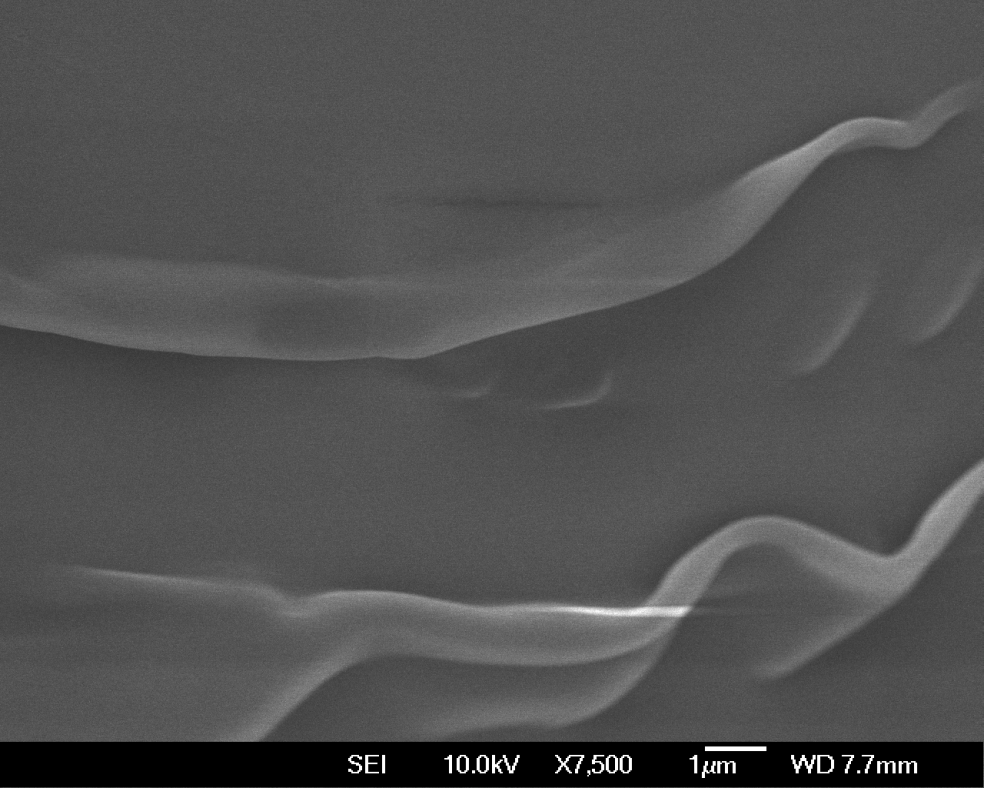
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**Figure S2.** Identification of dominant pathogenic fungi isolated from grape. (a: *P. expansum*, b: *A. niger* and c: *B. cinerea*.)



**Figure S3.** SEM image of the CS gel.

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**Figure S4.** The CGC of CS-Ag complex hydrogel.

1 DMSO 10mg (9)

**Figure S5.** TEM image of AgNPs.



**Figure S6.**CS-Ag hydrogel effect on decay rate of grape during postharvest.



**Figure S7.** CS-Ag hydrogel effect on weight loss rate of grape during postharvest.

**Figure S8.** CS-Ag hydrogel effect on soluble solids of grape during postharvest.

**Figure S9.** CS-Ag hydrogel effect on titratable acids of grape during postharvest.



**Figure S10.**CS-Ag hydrogel effect on Vitamin C of grape during postharvest.