

**Supplementary material: S1a, S1b.**

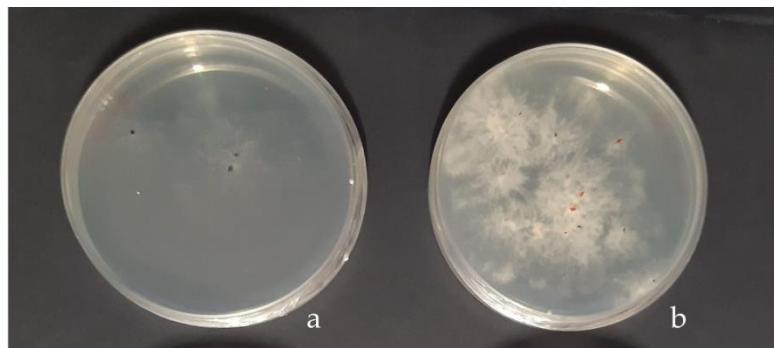


Figure S1a. Effect of PBPs from *Hydropuntia cornea* at 0.3 mg/mL on *Botrytis cinerea* colony forming units (a) compared to the control (b), 3 days after treatment.

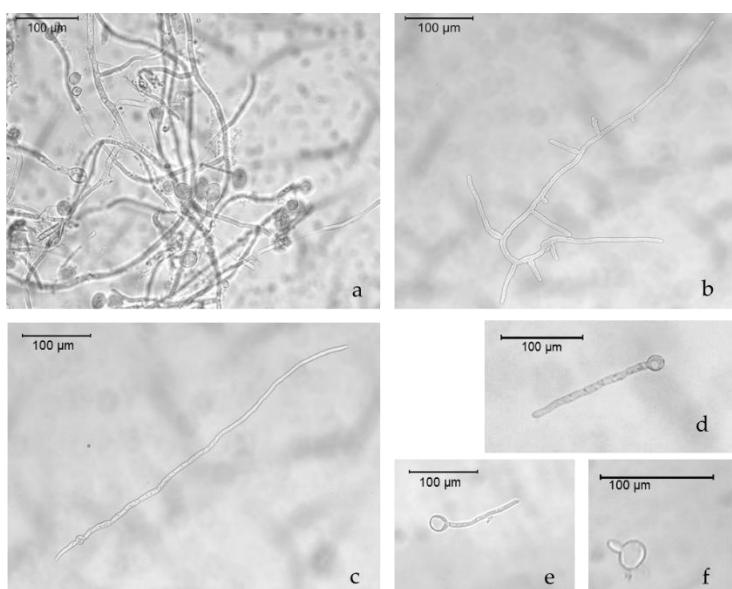


Figure S1b. Effect of PBPs from *Arthrosphaera platensis* at 0.6 mg/mL on *Botrytis cinerea* spore germination (c, d, e, f) compared to hyphal development from untreated spore (a, b), 24 hours after treatment.

**Supplementary charts**

Table of Fig. 4 – Activity of different doses of PBPs from *Hydropuntia cornea* and *Arthrosphaera platensis* against the *Botrytis cinerea* disease incidence of tomato fruits. Data were arcsin transformed. Each value ( $n = 4$ ) is a mean  $\pm$  SE.

Treatment mg/mL	<i>H. cornea</i>	<i>A. platensis</i>
0.3	0.46 $\pm$ 0.00	0.35 $\pm$ 0.12
0.6	0.60 $\pm$ 0.05	0.62 $\pm$ 0.05
1.2	0.76 $\pm$ 0.05	0.81 $\pm$ 0.06
2.4	1.09 $\pm$ 0.01	0.90 $\pm$ 0.04
4.8	1.22 $\pm$ 0.12	1.24 $\pm$ 0.11
Control	1.43 $\pm$ 0.08	1.41 $\pm$ 0.09

Table of Fig. 5 – Activity of different doses of PBPs from *Hydropuntia cornea* and *Arthospira platensis* against the *Botrytis cinerea* disease severity of tomato fruits. Data were arcsin transformed. Each value ( $n = 4$ ) is a mean  $\pm$  SE.

Treatment mg/mL	<i>H. cornea</i>	<i>A. platensis</i>
0.3	45.85 $\pm$ 6.07	52.43 $\pm$ 6.43
0.6	70.28 $\pm$ 7.28	50.16 $\pm$ 7.14
1.2	84.27 $\pm$ 7.23	56.05 $\pm$ 6.73
2.4	118.98 $\pm$ 6.12	50.35 $\pm$ 5.12
4.8	118.50 $\pm$ 8.38	63.99 $\pm$ 2.34
Control	209.51 $\pm$ 8.87	197.76 $\pm$ 6.82

Table of Fig. 7 – Effect of treatment of *Botrytis cinerea* colony portions with different concentrations of PBSs from *Hydropuntia cornea* and *Arthospira platensis* on colony growth at 3 days after treatment. Data are means values ( $n = 4$ )  $\pm$  SE.

Treatment mg/mL	<i>H. cornea</i>	<i>A. platensis</i>
0.3	45.50 $\pm$ 0.61	46.63 $\pm$ 0.85
0.6	43.50 $\pm$ 0.50	46.25 $\pm$ 0.43
1.2	43.63 $\pm$ 0.85	47.38 $\pm$ 0.55
2.4	41.38 $\pm$ 0.24	46.50 $\pm$ 0.20
4.8	40.25 $\pm$ 0.25	46.13 $\pm$ 0.31
Control	68.00 $\pm$ 0.41	69.00 $\pm$ 0.82

Table of Fig. 8 - Growth of *Botrytis cinerea* colonies on PDA amended with different concentrations of PBSs from *Hydropuntia cornea* and *Arthospira platensis* at 3 days after inoculation. Data are means values ( $n = 4$ )  $\pm$  SE.

Treatment mg/mL	<i>H. cornea</i>	<i>A. platensis</i>
0.3	66.25 $\pm$ 0.63	65.50 $\pm$ 0.65
0.6	66.25 $\pm$ 0.85	65.25 $\pm$ 0.85
1.2	66.00 $\pm$ 0.41	65.63 $\pm$ 0.55
2.4	59.50 $\pm$ 0.87	65.25 $\pm$ 0.63
4.8	57.50 $\pm$ 0.87	66.00 $\pm$ 0.41

Control	67.00 ± 0.82	69.00 ± 0.41
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Table of Fig. 9 - Effect of PBPs from *Hydropuntia cornea* and *Arthrosipa platensis* on colony forming units (CFUs), and on CFU colony growth of *Botrytis cinerea* at 2 days after spore treatment. Data are mean values ( $n = 4$ ) ± SE.

Treatment mg/mL	<i>H. cornea</i>	<i>A. platensis</i>	<i>H. cornea</i>	<i>A. platensis</i>
	CFUs	CFU colony growth (mm)		
0.3	2.00 ± 0.71	3.50 ± 0.29	1.25 ± 0.25	1.50 ± 0.29
0.6	1.00 ± 0.41	2.50 ± 0.50	0.75 ± 0.25	1.25 ± 0.25
1.2	1.00 ± 0.41	2.75 ± 0.63	0.75 ± 0.25	1.25 ± 0.25
2.4	1.00 ± 0.41	2.75 ± 0.48	0.50 ± 0.20	1.25 ± 0.25
4.8	1.25 ± 0.25	2.75 ± 0.48	0.50 ± 0.20	1.25 ± 0.25
Control	6.50 ± 0.29	6.25 ± 0.25	2.10 ± 0.4	2.90 ± 0.10