

Supplementary files

## Synthesis of Bioactive Silver Nanoparticles by a *Pseudomonas* Strain Associated with the Antarctic Psychrophilic Protozoon *Euplotes focardii*

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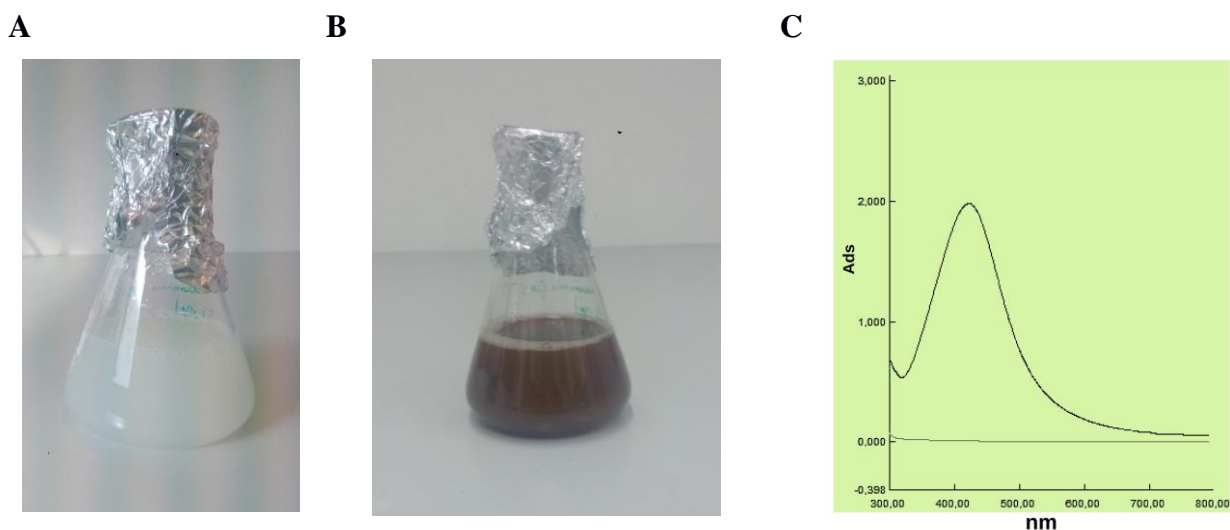
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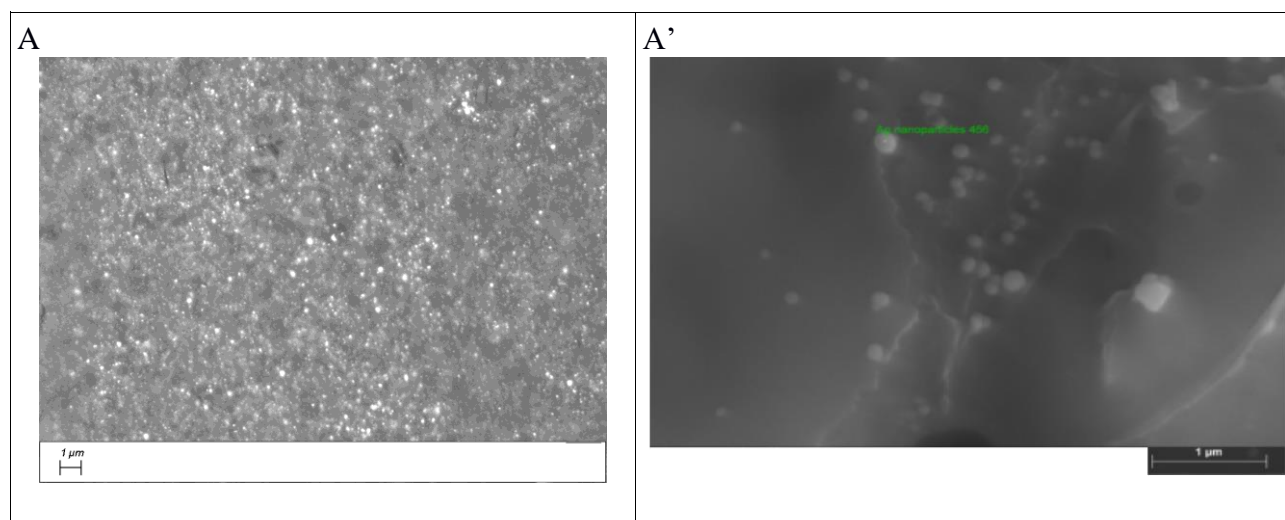
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Received: 30 November 2019; Accepted: 31 December 2019; Published: date



**Figure S1: AgNP synthesis by *Pseudomonas sp ef1*.** A and B: Visual observation of AgNP synthesis by medium colour change of a *Pseudomonas sp ef1* culture from with (A) to dark brown (B) during 24 hrs of incubation with 1mM of AgNO<sub>3</sub>. (C) UV–vis spectrum of *Pseudomonas sp ef1* AgNPs. A small aliquot (0.1 ml) of the 24 h *Pseudomonas sp ef1* culture was diluted with ddH<sub>2</sub>O and UV–visible spectra was recorded from 300 to 800 nm wavelength at room temperature.



**Figure 2.** Scanning electron microscopic (SEM) images of the *Pseudomonas sp ef1* AgNPs at different magnification. Bars: 1  $\mu$ M.

**Table S1.** Antimicrobial activity of AgNPs synthesized by *Pseudomonas sp* against various pathogenic organisms. R\* Resistance.

No	Microorganism	Bio-AgNps (A) (mm)	Chemical AgNps (B) (mm)	Increased zone size b/w A&B (A-B) (mm)	AgNO <sub>3</sub> (C) (mm)	Increased zone size b/w A&C (A-C) (mm)	Dist.Water (mm)
<b>Gram positive bacteria</b>							
1	<i>Staphylococcus aureus</i>	15	12	3	9	6	R
2	<i>Staphylococcus epidermidis</i>	13	10	3	9	4	R
3	<i>Streptococcus agalactie</i>	13	10	3	8	5	R
<b>Gram negative bacteria</b>							
4	<i>Escherichia coli</i>	17	14	3	10	7	R
5	<i>Klebsiella pneumoniae</i>	16	13	3	9	7	R
6	<i>Pseudomonas sp</i>	14	11	3	9	5	R
7	<i>Proteus mirabilis</i>	14	11	3	8	6	R
8	<i>Citrobacter koseri</i>	15	12	3	9	6	R
9	<i>Acinetobacter baumannii</i>	15	13	2	10	5	R
10	<i>Serratia marcescens</i>	14	11	3	8	6	R
<b>Fungi</b>							
11	<i>Candida albicans</i>	15	12	3	7	8	R
12	<i>Candida parapsilosis</i>	12	10	2	8	4	R