SUPPLEMENTARY MATERIAL

Phytosynthesis of silver nanoparticles using *Mansoa alliacea* (Lam.) A.H. Gentry (Bignoniaceae) leaf extract: characterization and their biological activities.

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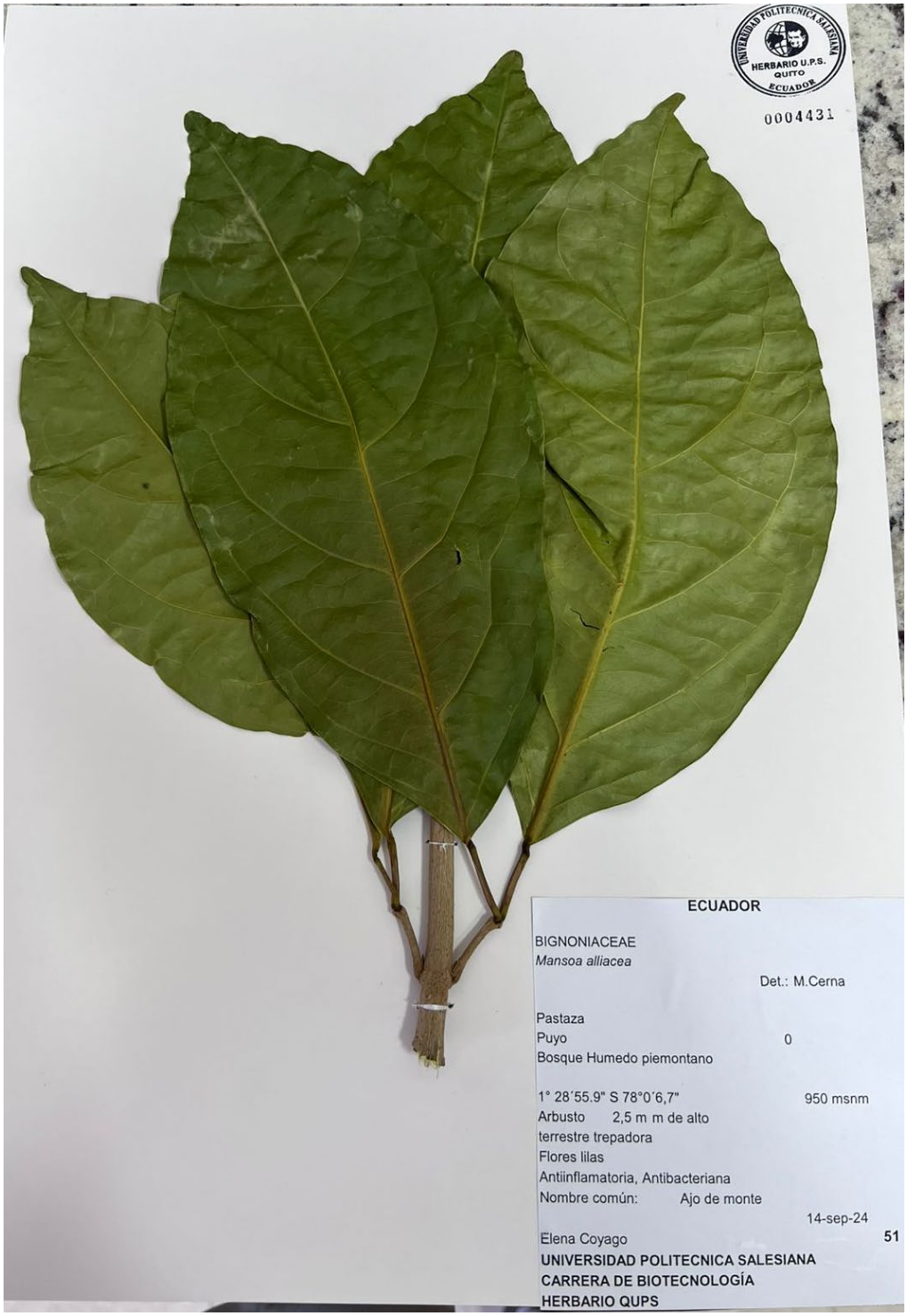


Figure S1. Identification of *Mansoa alliacea*.

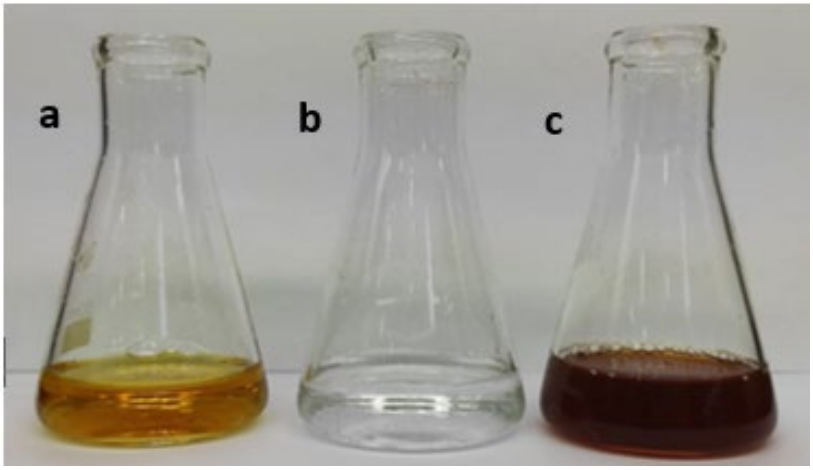


Figure S2. Green synthesis of silver nanoparticles, (**a**) leaf extract of *Mansoa alliacea*; (**b**) $AgNO_3$ 10 mM; (**c**) Ma-AgNPs suspension.

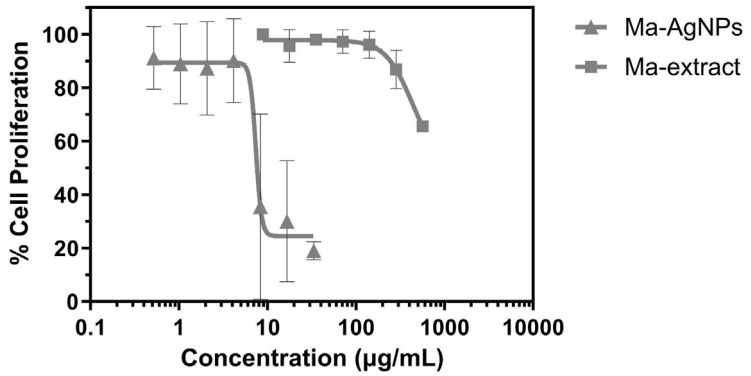


Figure S3. Dose-response curves of Ma-AgNPs and Ma-extract against RAW264.7 non-tumor cells. IC_{20} values were calculated to be 7.1 µg/mL for Ma-AgNPs and 371.3 µg/mL Ma-extract.

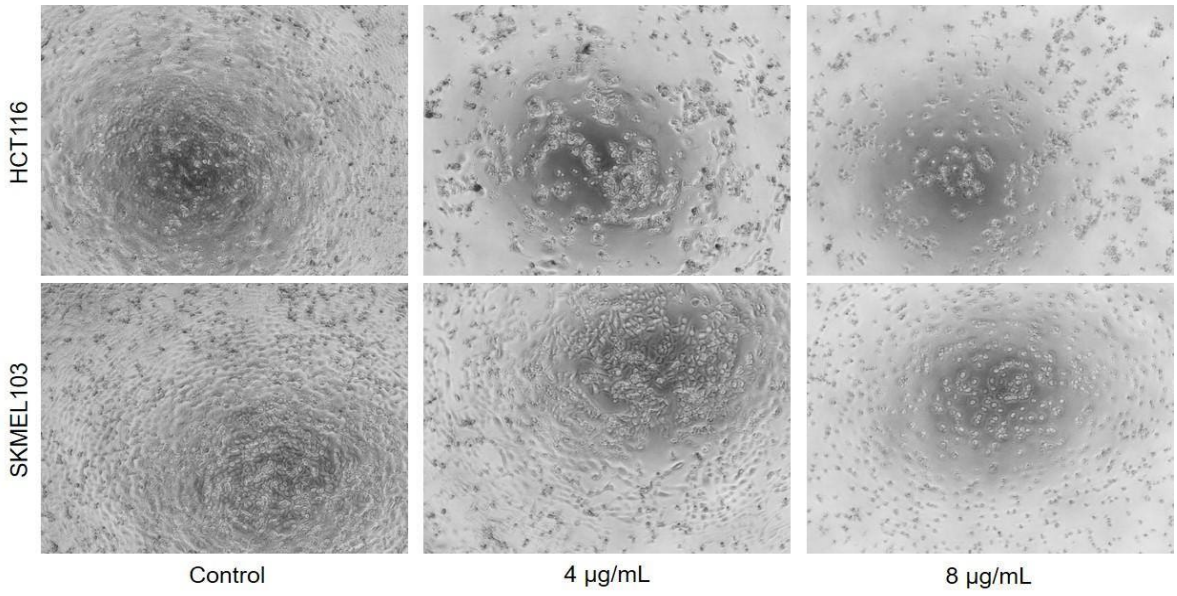


Figure S4. Representative images of tumor cells after 72 h of incubation with Ma-AgNPs at two concentrations (4X).

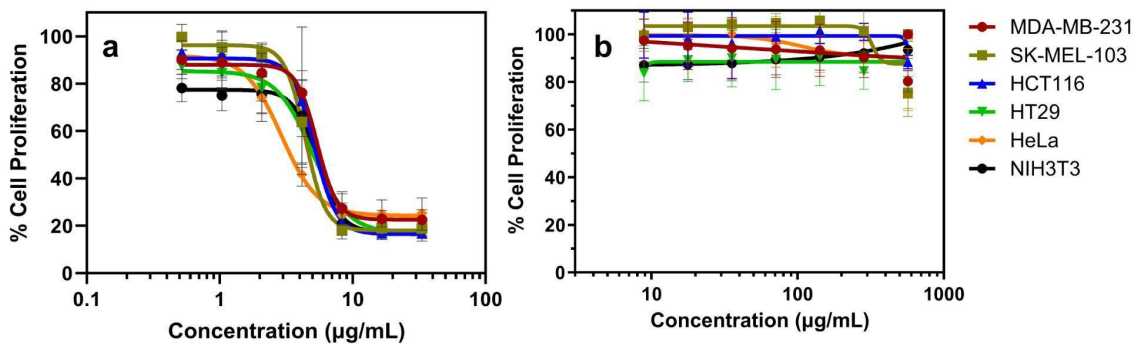


Figure S5. Dose-response curves of Ma-AgNPs (left) and Ma-extract (right) against tumor and non-tumor cell lines after 72 h incubation.

Table S1. Antibiofilm activity of biosynthesized silver nanoparticles.

Microorganism	**Biofilm Inhibition Assay**	
	MBIC50	**Inhibition rate**
Staphylococcus aureus **ATCC 25923**	30 µg/mL ($p<0.05$)	81 % ± 0.11
Enterococcus faecalis **ATCC 29212**	40 µg/mL ($p<0.05$)	80 % ± 0.19
Listeria monocytogenes **ATCC 13932**	30 µg/mL ($p<0.05$)	85 % ± 0.07
Candida tropicalis **ATCC 13803**	40 µg/mL($p<0.05$)	75 % ± 0.09

*MBIC50: Minimum Biofilm Inhibitory Concentration for 50% inhibition

Table S2. Antitumor activity of biosynthesized silver nanoparticles and extract. Mean and standard deviation (SD) are presented. This data was used to generate dose-response curves and calculate the IC_{50} values (Supp Material Figures C and D).

Ma-AgNPs

ug/mL	MDA-MB-231		SK-MEL-103		HCT116		HT29		HeLa		NIH3T3		RAW264.7	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
0	100	0	100	0	100	0	100	0	100	0	100	0	100	0
0.52	90.102	8.019	99.679	5.324	93.171	7.291	87.366	3.45	91.395	2.646	78.159	5.812	91.175	11.737
1.04	88.877	6.509	95.267	3.082	92.677	9.621	84.435	6.17	89.645	12.212	75.06	6.446	88.973	14.967
2.08	84.493	8.468	92.44	3.996	84.919	12.223	78.19	10.924	74.156	10.131	75.716	7.981	87.322	17.52
4.16	76.106	9.34	63.83	17.929	72.761	31.169	62.913	18.346	41.656	4.912	66.432	8.684	90.142	15.666
8.33	27.301	7.071	18.285	2.323	21.517	7.098	25.641	7.92	24.471	5.272	20.813	3.504	35.508	34.688
16.65	22.981	3.518	18.916	3.192	16.84	2.657	18.375	2.722	25.12	5.834	20.273	3.022	29.985	22.69
33.3	22.519	4.309	18.792	3.002	16.868	2.377	17.927	4.367	25.328	6.437	18.147	2.053	19.041	3.438

Ma-extract

ug/mL	MDA-MB-231		SK-MEL-103		HCT116		HT29		HeLa		NIH3T3		RAW264.7	
0	100	0	100	0	100	0	100	0	100	0	100	0	100	0
8.87	97.414	9.077	99.605	6.685	99.707	9.668	83.687	11.62	100.756	12.399	87.137	7.105	100	0
17.73	95.204	10.015	103.021	3.401	98.166	11.221	89.163	8.876	97.732	9.282	87.328	6.345	95.627	6.184
35.47	94.188	12.818	104.365	2.771	96.396	14.958	89.912	12.062	100.285	10.875	87.836	7.489	98.021	0.584

70.94	93.751	11.716	104.74	4.051	99.061	5.374	89.427	12.7	96.849	10.602	89.534	6.502	97.297	4.41
141.88	93.309	10.934	105.825	6.348	101.713	5.556	90.717	12.235	93.609	9.715	90.622	5.602	96.092	5.074
283.75	90.289	8.397	101.439	8.692	101.063	3.583	84.52	7.497	90.727	6.196	92.079	8.203	86.884	7.201
567.50	80.249	4.394	75.153	9.707	88.389	2.858	75.572	6.776	81.015	13.034	93.574	3.638	65.543	1.982