

Fractionation of biomolecules in *Withania coagulans* extract for bioreducing in nanoparticles synthesis, antifungal and biofilm activity

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Experimental Section

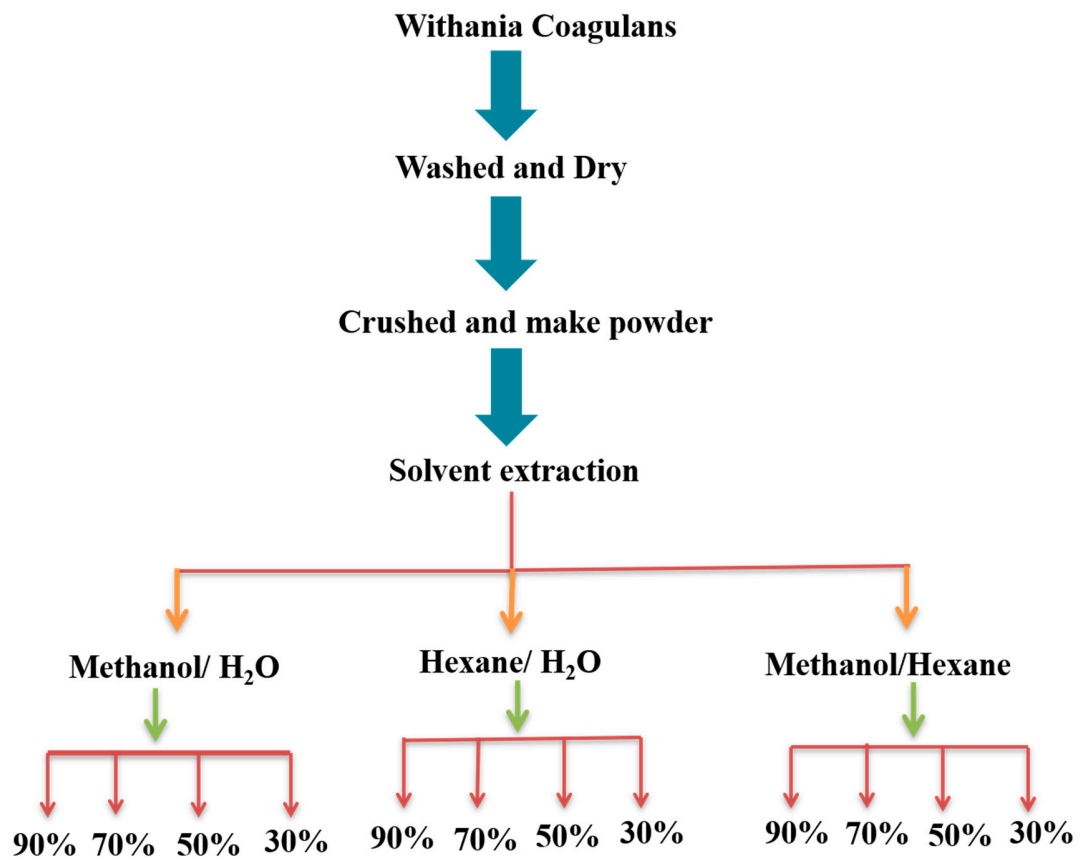


Figure. S1 Screening strategy for exploring bioactive fraction of *W. coagulans*

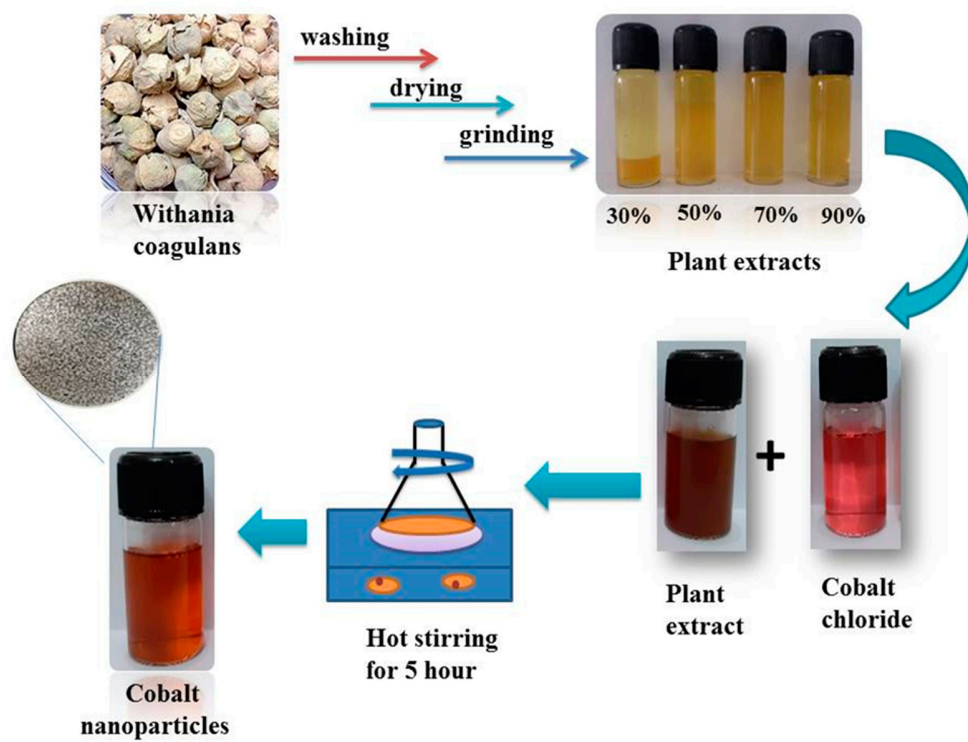


Figure. S2 Synthesis of cobalt Nanoparticles via morphological changes in reaction

Table S1 Different solvent fractionation of *Withania coagulans*

Serial #	Fractions	Code	Serial #	Fractions	Code
1	90% Methanol/H ₂ O	M1	7	50% Hexane/H ₂ O	H3
2	70% Methanol/H ₂ O	M2	8	30% Hexane/H ₂ O	H4
3	50% Methanol/H ₂ O	M3	9	90% Methanol/Hexane	X1
4	30% Methanol/H ₂ O	M4	10	70% Methanol/Hexane	X2
5	90% Hexane/H ₂ O	H1	11	50% Methanol/Hexane	X3
6	70% Hexane/H ₂ O	H2	12	30% Methanol/Hexane	X4

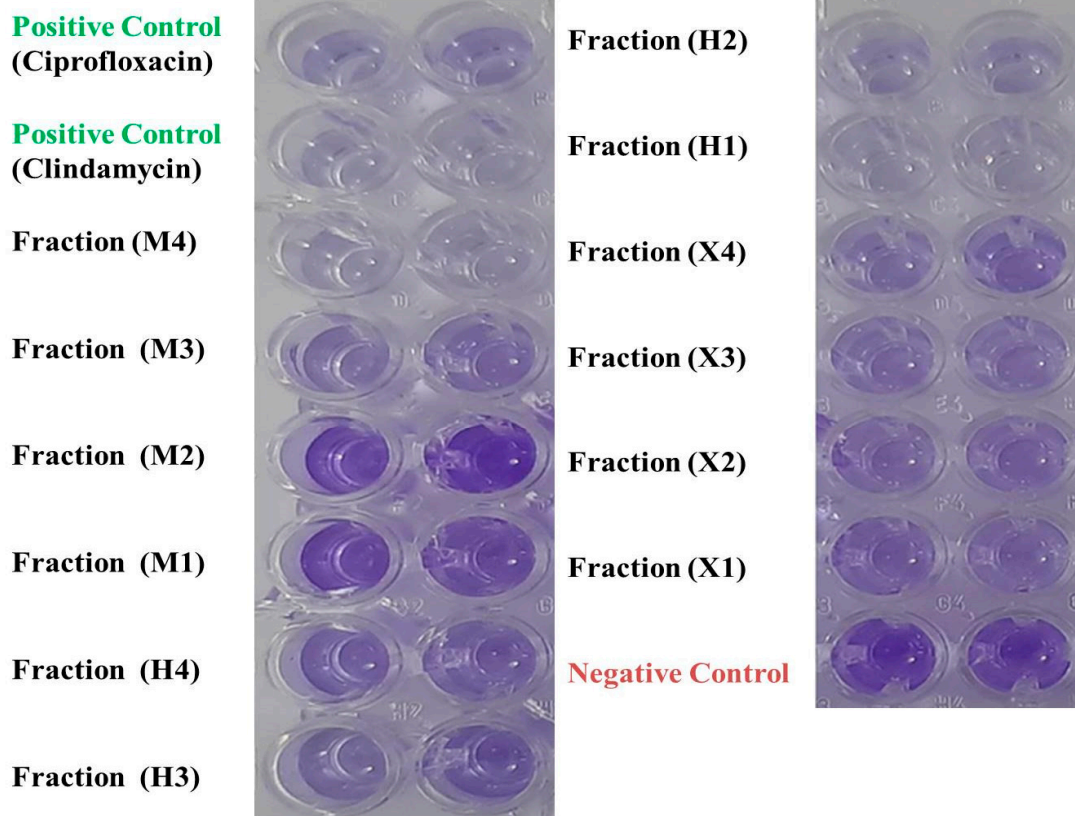


Figure S3. Anti-biofilm assay of different fractions at concentration 5mg/mL against *pseudomonas aeruginosa*

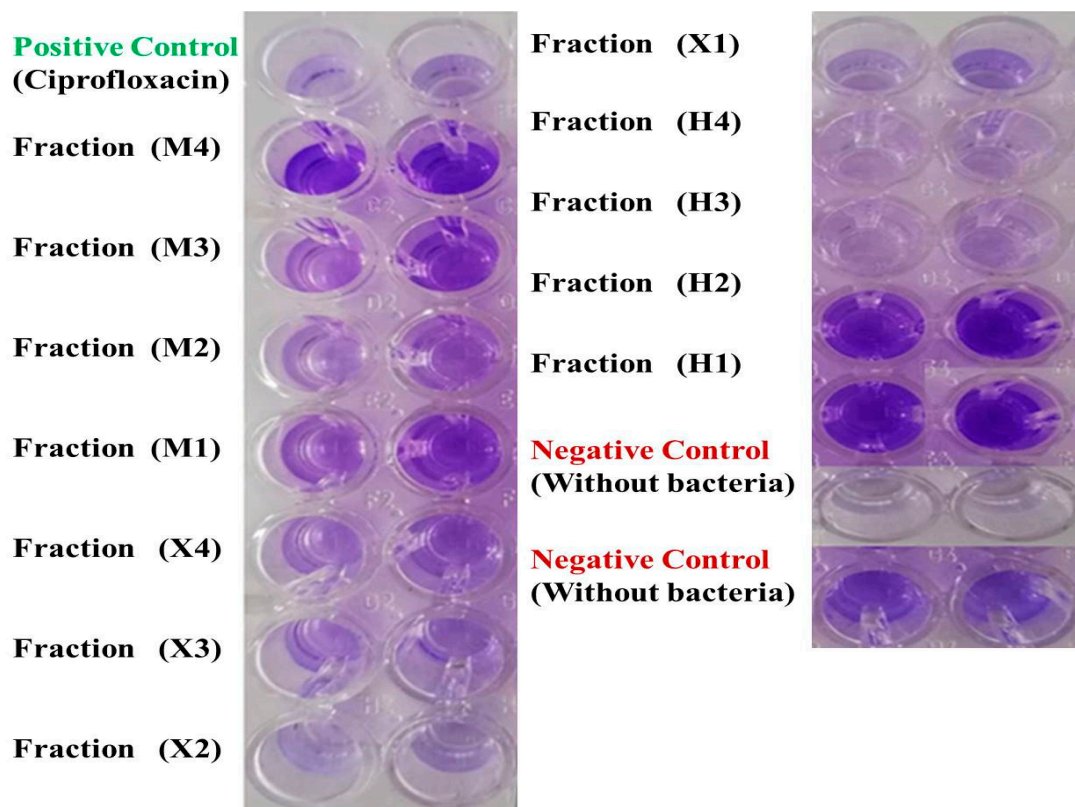


Figure S4 Anti-biofilm assay of different fractions at concentration 10mg/ml against *pseudomonas aeruginosa*

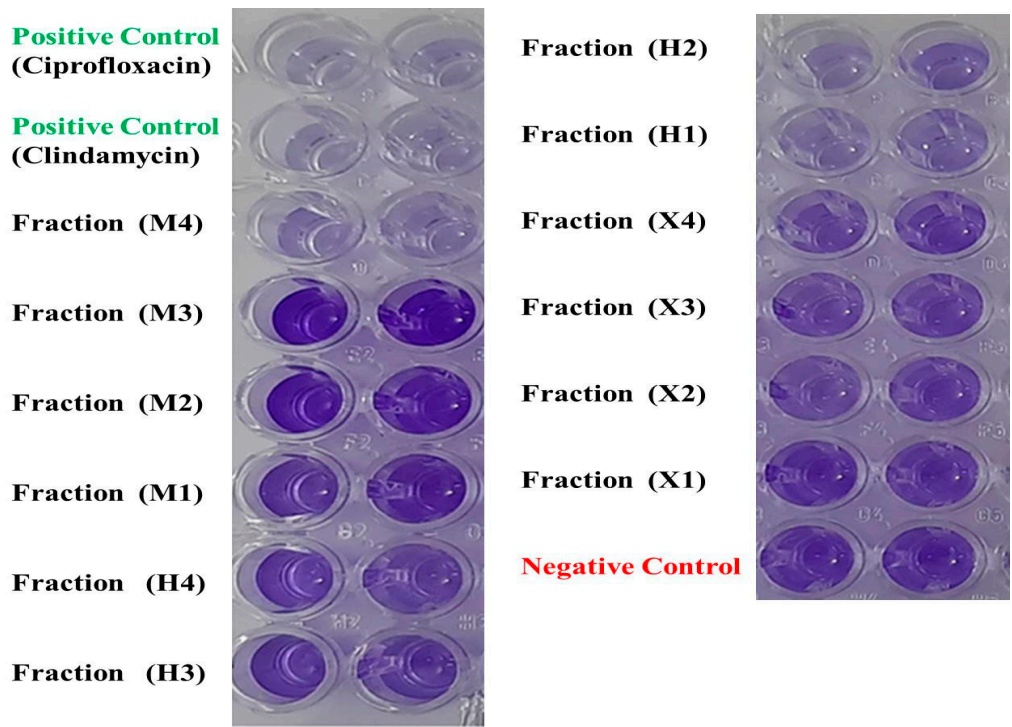


Figure S 5. Anti-biofilm assay of different fractions at concentration 5mg/ml against *Staphylococcus aureus*

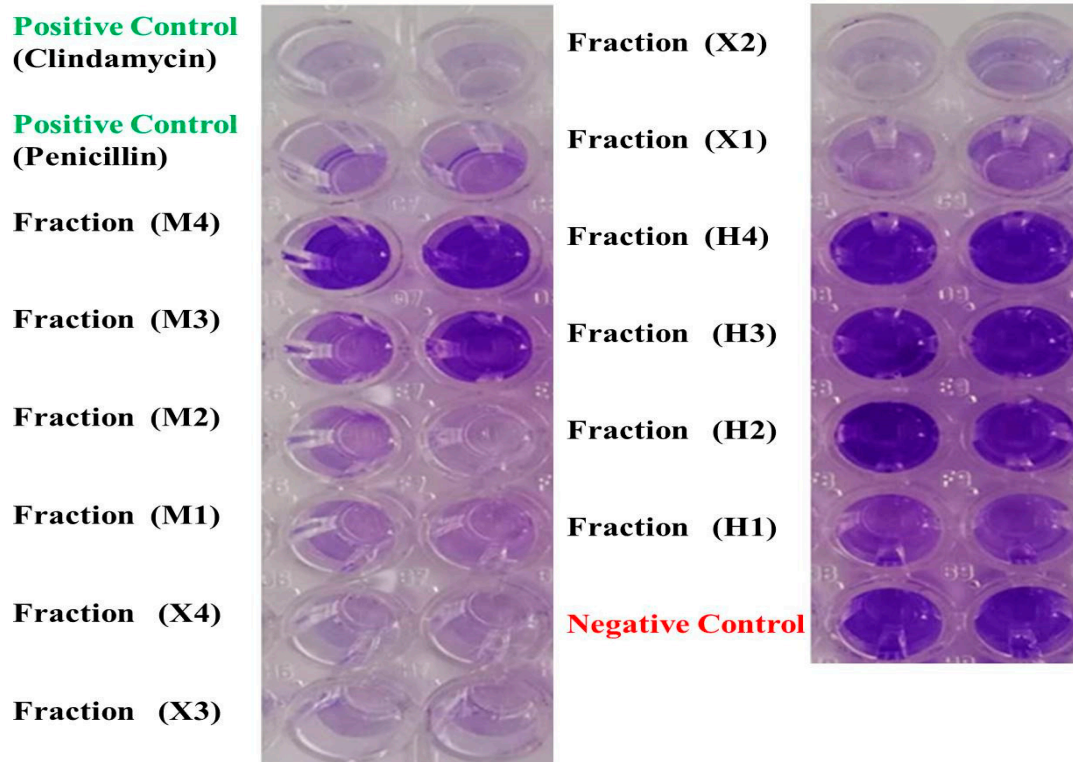


Figure S6. Anti-biofilm assay of different fractions at concentration 10mg/ml against *staphylococcus aureus*