

APPENDICES

Appendix I

1. Equipments and Apparatus: Autoclave, Heater, Weighing Machine, Petriplates, Incubator, Spirit lamp, Electric grinder, Electric Balance, Inoculating Loops, Note Book/Markers/Pencils, Dropper, Refrigerator, Hot Air Oven, Forceps, Cotton Rolls, Wash Bottles, Round Bottomed Flask, Measuring Cylinder, Funnels, Beakers, Rotavapor, crucible, Laminar air flow, plant cutter, separating funnel, test tubes, etc.

2. Chemical, Media for Culture, Reagents: dextrose, Nutrient Agar (NA), Nutrient Broth (NB), Spirit, Fehling 'A' Solution, Fehling 'B' Solution, Mayer's Reagents, Mercuric Chloride, Tetracycline tablets, Copper Sulphate, Buffer Tablets, Ferric Chloride, Wagner's Reagents, Potassium Iodide, Methanol, Conc. H₂SO₄, Iodine, Conc. HCl, Chloroform, Ethanol, etc.

3. Other Required Materials:

Distilled water, Mask, Gloves, Muslin clothes, Aluminium Foil, Filter Paper, Whatman filter paper, Price tag, Zipper bag, Camera, etc.

Appendix II

Composition of Media and Reagents Used in the Study

Nutrient media

1.	Nutrient Agar (NA)	
	Composition	Grams/Litre
	Peotone	5.00
	Sodium Chloride	5.00
	Beef extract	1.50
	Yeast extract	1.50
	Agar	15.00
	Final PH (at 25° C)	7.4±0.2

Procedure

28g of media was dissolved in 1000ml of distilled water and heated to dissolve the media. The media was sterilized by autoclaving at 15lbs pressure at 121°C for 15 minutes.

2.	Nutrient Broth (NB)	
	Composition	Grams/Liters
	Peptone	5.00
	Sodium Chloride	5.00
	Beef extract	1.50
	Yeast extract	1.50
	Final PH (at 25°C)	7.4±0.2

13g of media was dissolved in 1000ml of distilled water and heated to dissolve the media. The media was sterilized by autoclaving at 15lbs pressure at 121°C for 15 minutes.

Appendix: III

Table A: Percentage yield of the extract

Plant name	Part used	Solvents	Wt. of powered used(gm)	Wt. of the extract (g)	% yields
<i>A. adenophora</i>	leaves	DW	25	4.12	16.48
	leaves	Methanol	25	2.67	10.68
<i>Ipomoea carnea ssp. fistulosa</i>	leaves	DW	25	3.92	15.68
	leaves	Methanol	25	2.78	11.12
<i>X. strumarium</i>	leaves	DW	25	3.35	13.6
	leaves	Methanol	25	1.55	6.2

Table B: Alkaloids test for leaf extract of tested plant

SN	leaf extract	Initial wt. of filter paper (g)	Final wt. of filter paper(g)	Total alkaloid (g)	Percentage (%)
1.	<i>Ageratina adenophora</i>	0.994	1.147	0.153	6.12
2.	<i>Xanthium strumarium</i>	0.724	0.74	0.016	0.64
3.	<i>Ipomoea carnea ssp. fistulosa</i>	0.743	0.783	0.04	1.64

Table C: Saponins test for leaf extract of tested plant

SN	Leaf extract	Initial wt. of crucible(g)	Final wt. of crucible(g)	Total saponin(g)	Percentage (%)
1.	<i>Ageratina adenophora</i>	44.722	45.246	0.524	5.24%
2.	<i>Xanthium strumarium</i>	54.594	56.255	1.661	16.61%
3.	<i>Ipomoea carnea ssp. fistulosa</i>	43.189	46.376	3.187	31.87%

Table D: Flavonoids test for the leaf extract of tested plant

SN	Leaf extract	Initial wt. of crucible(g)	Final wt. of crucible(g)	Total flavonoid(g)	Percentage (%)
1.	<i>Ageratina adenophora</i>	43.171	43.482	0.311	3.11
2.	<i>Xanthium strumarium</i>	44.705	45.169	0.464	4.64
3.	<i>Ipomoea carnea ssp. fistulosa</i>	54.622	55.187	0.565	5.65

PHOTO PLATES I



A=Ageratina adenophora



B=Ipomoea carnea ssp.fistulosa



C=Xanthium strumarium



D=Drying of leaves in shed

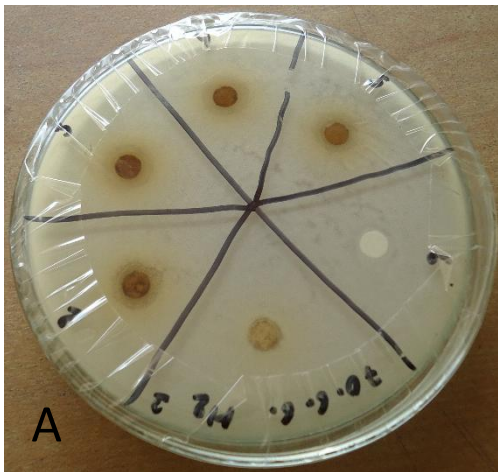


E=packed powder of plants

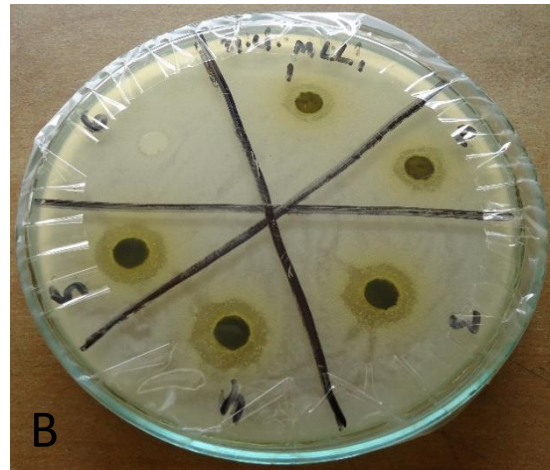


F= Filtrate of selected plants

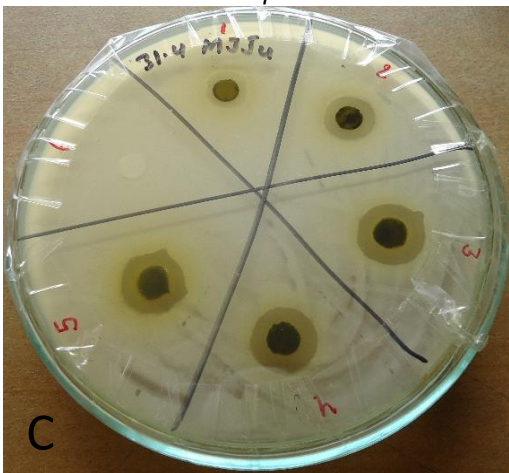
PHOTO PLATES II



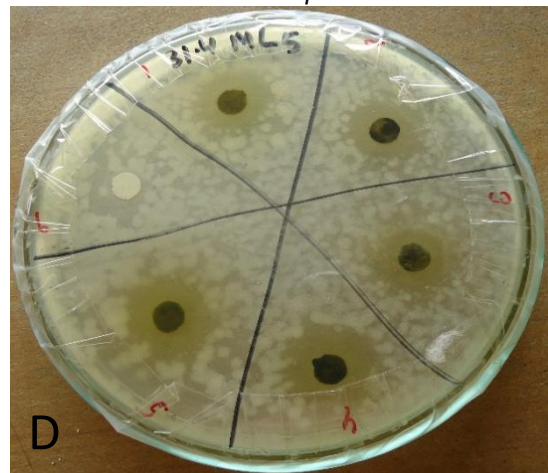
A= *K. pneumoniae* in DW extract of *A. adenophora*



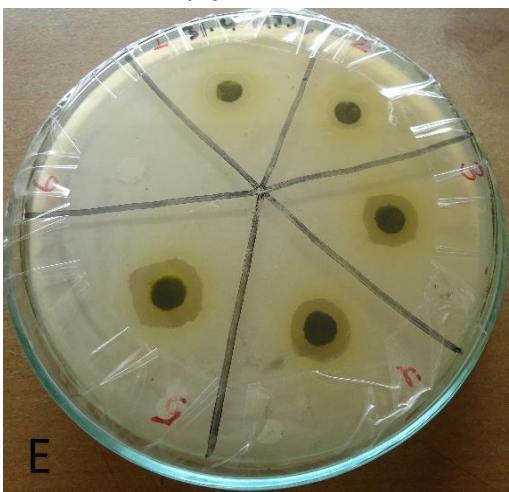
B= *E. coli* in Methanol extract of *A. adenophora*



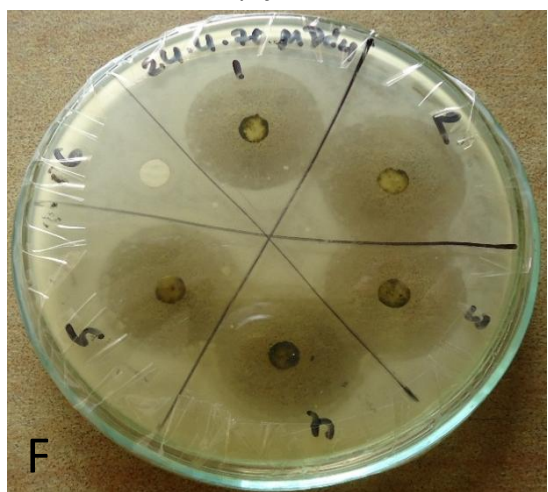
C= *P. mirabilis* in DW extract of *I. carnea* ssp. *fistulosa*



D= *E. faecalis* in Methanol extract of *I. carnea* ssp. *fistulosa*

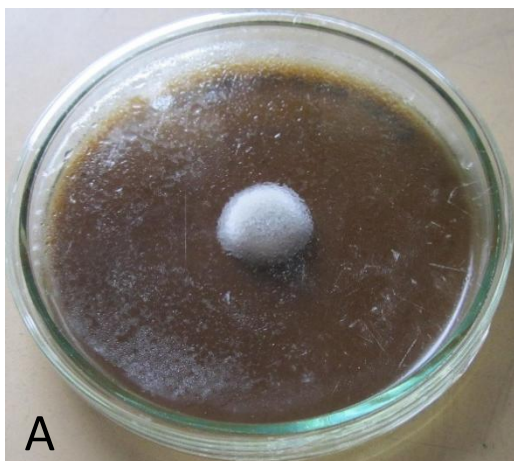


E= *B. subtilis* in DW extract of *X. strumarium*



F= *S. aureus* in Methanol extract of *X. strumarium*

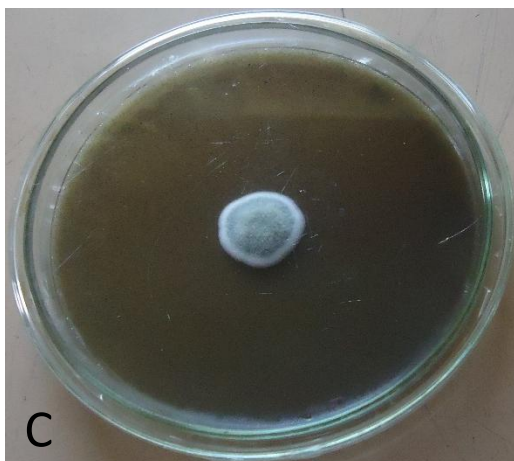
PHOTO PLATES III



A= *A. brassicae* in DW extract of *A. adenophora* at 250 mg/ml



B= *P. capsici* in Methanol extract of *A. adenophora* at 150 mg/ml



C= *B. cinerea* in DW extract of *I. carnea* ssp. *fistulosa* at 250 mg/ml



D= *F. oxysporum* in Methanol extract of *I. carnea* ssp. *fistulosa* at 200 mg/ml



E= *S. rolfii* in DW extract of *X. strumarium* at 250 mg/ml



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PHOTO PLATES IV

Qualitative test of selected IAS



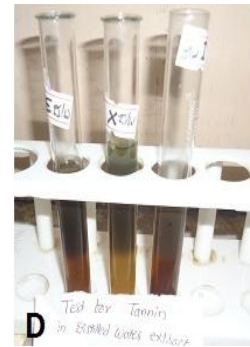
A=Terpenoids test



B= Saponins test

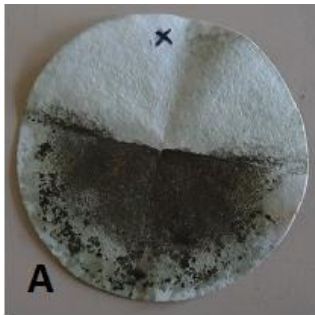


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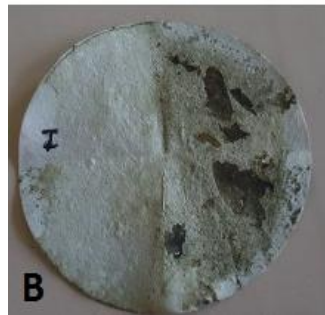


D= Tannin test

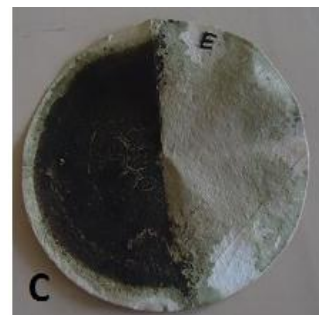
Quantitative test of Alkaloids



A= *Xanthium strumarium*



B= *Ipomoea carnea* spp. *fistulosa*



C= *Ageratina adenophora*

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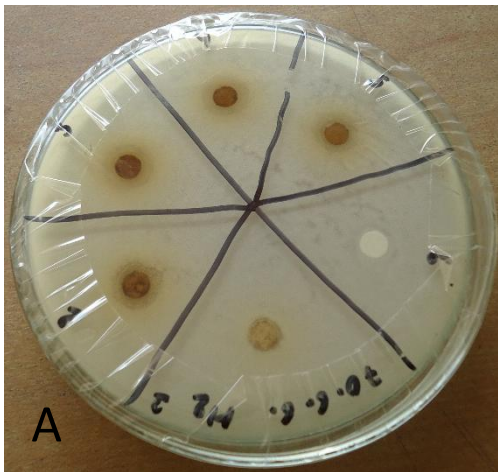


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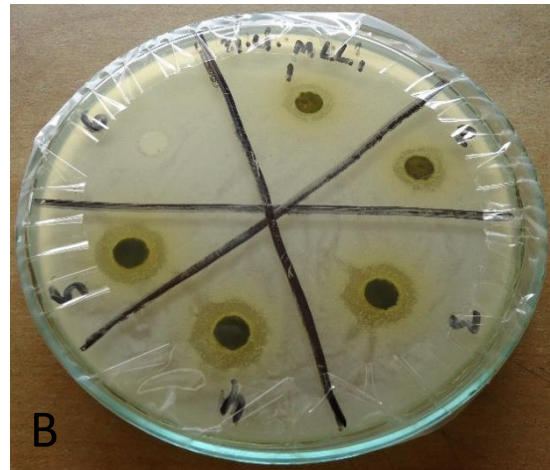


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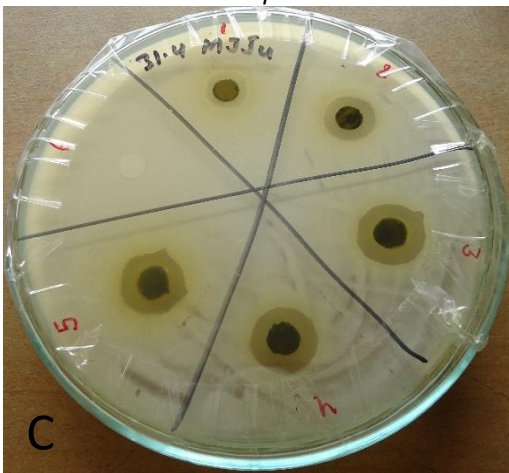
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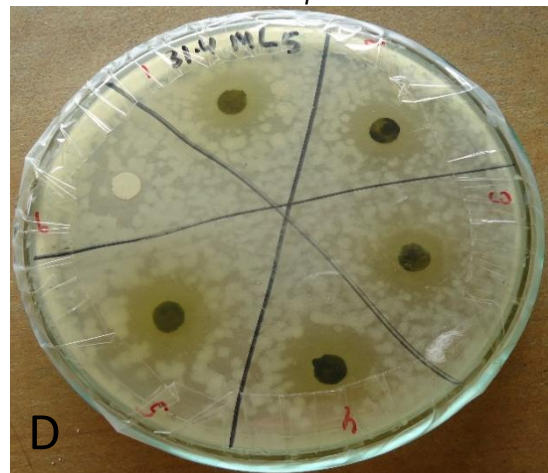
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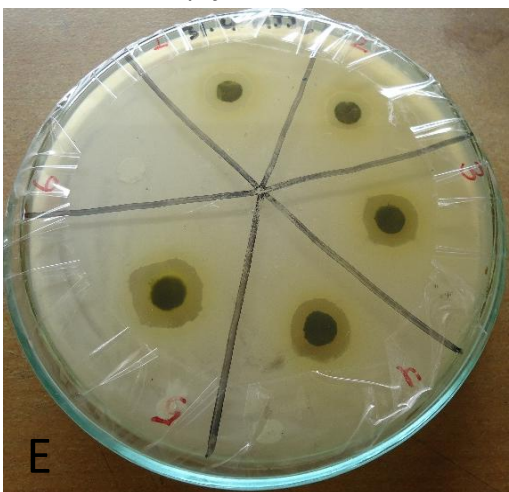
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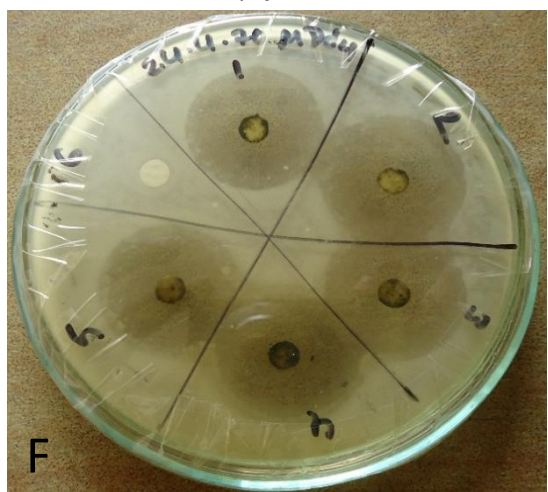
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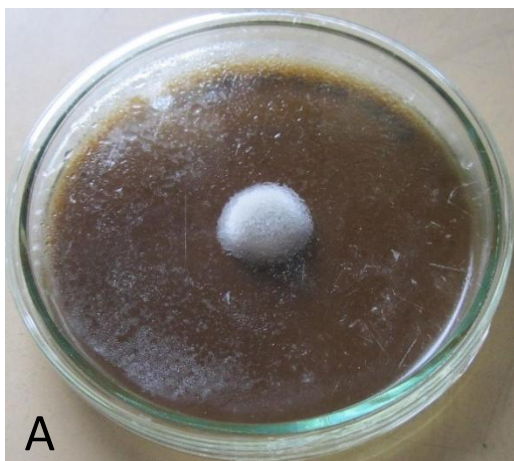


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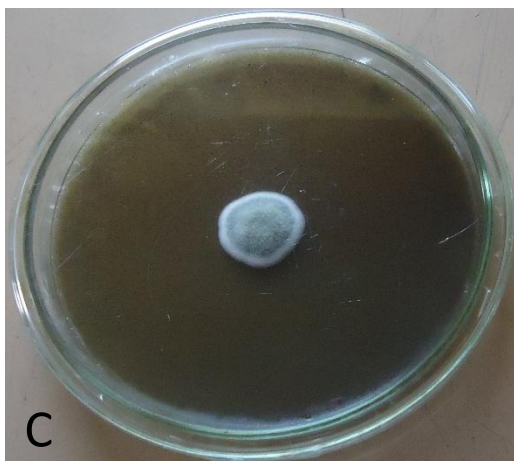
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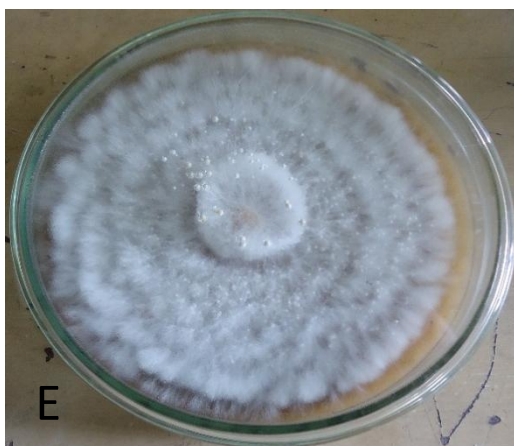
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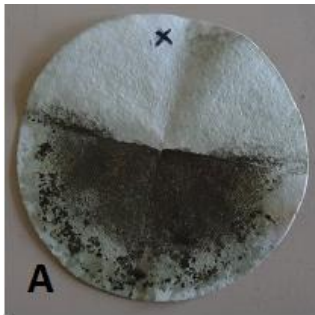


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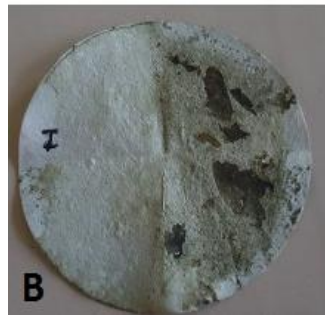


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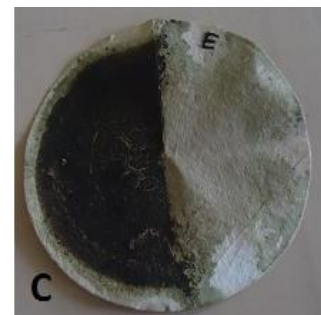
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