
LIST OF TABLES

Table No.	Title	Page
1	The antibiotics used to test the susceptibility of bacterial isolates .	69
2	The list of the natural plants which have been screened for their antimicrobial activity against the testing bacterial iaolates .	73
3	Total bacterial count isolated from different collected urine samples	83
4	Percentage of positive urine samples collected from different ages of males and females patient.	88
5	Percentage of community –acquired and hospital- acquired UTIs in males and females	90
6	Biochemical reaction of <i>E. coli</i> , <i>Klebsiella pneumonia</i> , <i>Pseudomonas aeruginosae</i> and <i>Staphylococcus aureus</i>	96
7	The percentage of distribution number of pathogenic bacterial isolates and <i>Candida albicans</i> from positive collected samples	97
8	Susceptibility and inhibition zone (mm) of different antibiotics drugs used against clinical <i>E.coli</i> isolates	101
9	Sensitivity test of pathogenic <i>E. coli</i> isolates against different antibiotics	109
10	Minimum inhibitory concentration (MIC) and minimum bactericidal concentration(MBC) of some selected antibiotics	111
11	Effect of alcoholic plant extract on selected <i>E. coli</i> isolates	114
12	Effect of cold water plant extract on selected <i>E. coli</i> isolates	115
13	Effect of boiled water plant extract on selected <i>E.coli</i> isolates	118
14	Effect of different concentrations of alcoholic extract of clove on the selected <i>E. coli</i> isolates	120
15	Effect of different concentrations of alcoholic extract of fresh ginger on the selected <i>E. coli</i> isolates	121
16	Effect of different concentrations of alcoholic extract of rosemary on the selected <i>E. coli</i> isolates	122
17	Effect of different concentrations of alcoholic extract of peppermint on the selected <i>E. coli</i> isolates	123
18	Effect of different concentrations of alcoholic extract of thyme on the selected <i>E. coli</i> isolates	124
19	Effect of different concentrations of aqueous (cold) extract of thyme on the selected isolated of <i>E. coli</i>	125
20	MICs of different natural plant extract on selected isolates of <i>Escherichia coli</i>	126
21	Effect of combination between plant extracts and MICs of amikacin against selected <i>E. coli</i> isolates	131
22	Effect of combination between plant extracts and MICs of ciprofloxacin against selected <i>E.coli</i> isolates	132
23	Effect of combination between plant extracts and MICs of gentamicin against selected <i>E. coli</i> isolates	133
24	Effect of combination between plant extracts and MICs of levofloxacin against selected <i>E.coli</i> isolates	134
25	Effect of combination between plant extracts and MICs of norfloxacin against selected <i>E.coli</i> isolates	135

LIST OF FIGURES

Figure No.	Tittle	Page
1	Percentage of positive urine samples collected from patients with different ages of males and females	89
2	Percentage of community –acquired and hospital- acquired UTIs in males and females	91
3	The percentage of distribution of pathogenic bacterial isolates and <i>Candida albicans</i> from positive collected samples	98
4	The percentage of distribution of pathogenic bacterial isolates and <i>Candida albicans</i> from collected positive samples in males and females	99
5	Minimum inhibitory concentration (MICs)($\mu\text{g/ml}$)of different antibiotics against tested <i>E.coli</i> .	112
6	Minimum inhibitory concentration (MICs)(%) of different plant extract against tested <i>E.coli</i>	127
7	¹ HNMR spectrum of antimicrobial substances	142
8	IR spectrum of the antimicrobial substances	143

LIST OF PHOTOS

Photo No.	Tittle	Page
1	Effect of cold plant extract on the selected isolates no.(102, 59, 17&1)	116
2	Effect of cold plant extract on the selected isolates no.(54,19,46&49)	117
3	Effect of combination between antibiotic and plant extracts against bacterial isolates no. 17 by disc diffusion method	136
4	Effect of combination between antibiotic and plant extracts against bacterial isolates no. 19&54 by disc diffusion method	137
5	Effect of combination between antibiotic and plant extracts against bacterial isolates no. 102 by disc diffusion method	138
8	Protein analysis for clinical <i>E .coli</i> before and after stress	140

LIST OF ABBREVIATION

AK	Amikacin
AMC	Amoxicillin – clavulanic Acid
ASB	Asymptomatic bacteriuria
CAUTI	Catheter-Associated Urinary Tract Infection
CFU	Colony forming unit
CIP	Ciprofloxacin
CLED	Cystine- lactose-Electrolyte-Deficient
CN	Gentamicin
CTX	Cefotaxime
DM	Diabetes mellitus
ESBL	extended spectrum beta lactamase
IR	Infra Red
JGTE	Japanese green tea extract
LEV	Levofloxacin
MBC	Minimum bactericidal concentration
MIC	Minimum inhibitory concentration
MRSA	Methicillin Resistant <i>Staph. aureus</i>)
MSA	Mannitol Salt Agar
NA	Nalidixic acid
NCCLS	National Committee for Clinical Laboratory Standard
NMR	Nuclear Magnetic Resonance
NOR	Norfloxacin
NUTI	Nosocomial Urinary Tract Infection
OFX	Ofloxacin
PAP	Pyelonephritis-associated pili
SAM	Sulbactam-ampicillin
TLC	Thin Layer Chromatography
TMP-SMX	Trimethoprim- sulfamethoxazole
TSI	Triple Sugar Iron
UPEC	Uropathogen <i>Escherichia coli</i>
UTI	Urinary tract infections