



Fabales

Cassia italica (Mill.)

Cassiae

Tribs

Ceasalpiniaceae

8

115

Cassia

(1) *C. italic*

(2)

laxative

Sennoside-A

(4 3)

Sennoside-B

(6)

(5)

Bacillus

bacteriostatic

Pseudomonas aeurogones

bacteriocidal

anthrasus

.(7)

Anthraquiones Tannins

(8)

Sterols Sugar Triterpens Carotenoids Flavoniod

C.italic

.

(11 10 9)

Dissecting microscope

Olympus

Compound microscope

Wild

Ocular micrometer

Label

Collector

15

121

7

S.S.agar

15

/

:

.Nutrient Agar (NA)

-1

.Nutrient Broth (NB)

-2

.MacConkey Agar (MA)

-3

.Manitol Salt Agar

-4

.Blood Agar (BA)

-5

.Potato Dextrose Broth (PDB)

-6

.S.S agar medium (Salmonella-Shigella agar)

-

-7

:

:

Candida albicana

.

-

Serial dilution

/ $10^8 \times 1$

(NB)

10

37

18

(PDB)

420

Cassia italica

250

30 (12)

%80

200

7 45

37

/ %20

0.2

200

30

Whatman No.1

48 37

.(13) 0.2

/ %20

:

/ 150 100 50

6

0.2
4
24 37
.(14)

Minimum Inhibitor Concentration (MIC)

:

/ 150

(NB) / 150 100 50 25

0.1

24 37

2 1

(MIC) / 50

Amoxicillin Tetracycline

:

-

(15)

/ 150 100 50

200

37 24

Complete Randomized Design (CRD)

Duncan Multiple Range Test

.(16) 0.05

150-	Normal tap root	Perennials	
	Cylindrical		10
Pinnately		Glabrous	
8-5	Leaflets	Paripinnate	compound
	2.5-1 x 1.2-0.5	Oblong	
	Obtuse		Entire
Lanceolate	Stipules	Pilose	
	6-3	Simple raceme	
	5-3	Pilose	Peduncles
	2-1.5 x 0.5-0.4	Pediceles	
		.Tomentose	
Bisexual	Hermaphrodite		
Oblong-Ovate		Actinomorphic	
5	Polysepalous		
	9-8 x 6-5	Ovate	
		Pilose	
Limb		5	Polypetalous
1-0.9	Claw	1.8-1.5 x 1.9-1.4	
Bright			
	Hirsutulous		yellow
	2	2	8
			10

	6.5-6 x 1.5-1.2	Lanceolate
	7-2.5	Filiform
6.5- x 1.5-1		Sessile
	Geniculate	6
Terminal	9-7 x 1.5-0.75	Tomentose
Tuberculate	Lineate	
Legume or Pod	3.5-3 x 0.5-0.25	
Flattened	10-5 x 1.2-0.8	
	Sub quadrate-rectangular	
12-5	5-4.5 x 2.5-2	Reticulate

K. pneumonia

(1)

S. typhi *E. coli* *S. aureus*

/ 150

20.251 26.25 17.80 20.25

6

P. aeruginosa *B. subtilis*

17.15 16.25

/ 150

17.90

/ 100

C. albicans

. / 150

DNA

(20)

(19 18 17)

Corynebacterium

Bacillus anthracis

Pseudomonas pseudomalliae pseudodiphthericum

Macrophage

22)

(21)

(

(Mean±SE)

:(1)

/				
150	100	50		
20.25±0.250 d	16.75±0.250 c	*15.35±0.35 b	6.00±0.00 a	<i>Eschereshia coli</i>
26.25±0.250 d	22.75±0.250 c	21.35±0.350 b	6.00±0.00 a	<i>Staphyloccocus aureus</i>
17.80±0.200 d	15.50±0.500 c	14.25±0.250 b	6.00±0.00 a	<i>Klebsiella pneumonia</i>
20.25±0.250 d	16.75±0.250 c	15.35±350 b	6.00±0.00 a	<i>Salmonella typhi</i>
15.18±0.150 d	16.25±0.250 c	6.95±0.250 b	6.00±0.00 a	<i>Bacillus subtilus</i>
17.15±0.150 c	15.85±0.350 bc	14.90±0.900 b	6.00±0.00 a	<i>Pseudomonous aeurogenosa</i>
15.18±0.350 c	17.90±0.100 c	14.35±0.350 b	6.00±0.00 a	<i>Candida albicana</i>

6

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Amoxycillin Tetracycline

Tetracycline / 150 (2)

16.57 15.50 *Staphyloccocus aureus* *E. coli*

Amoxycillin / 150 (3)

18.85 *K. pneumoniae* *P. aeurogenosa* *B. Subtilus* *S. typh*

15.90 16.85 18.32

S. E. coli

/ 150

S. typhi P. aeurogenosa aureus

Tetracycline : (2)

(Mean±SE)

/			
150	100	50	
15.50±1.500 a	14.35±0.350 a	12.75±0.250* a	<i>Eschereshia coli</i>
16.75±0.250 b	15.15±0.150 a	14.25±0.250 a	<i>Staphylococcus aureus</i>

6

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Tetracycline

:(3)

(Mean±SE)

/			
150	100	50	
18.85±0.150 c	17.75±0.250 b	14.90±0.100* a	<i>Salmonella typhi</i>
18.32±0.300 c	15.90±0.400 b	13.75±0.250 a	<i>Bacillus subtilus</i>
16.85±0.150 c	15.75±0.250 b	14.30±0.300 a	<i>Pseudomonous aerogones</i>
15.90±0.100 c	14.75±0.250 b	12.85±0.150 a	<i>Klebsiella pneumonia</i>

6

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.(2007) . **-17**

.*Duranta repen*

Beayveria bassiana (balsam)Vull.

.*Culex pipiens pipiens*

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Morphological studies for *Cassia italica* (Mill.) and effect of alcoholic and hot water plant extract on different bacteria and yeast.

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Abstract

A bacteriological and morphological studies were conducted in biotechnology department/Alnahreen University, and biology department/college of science for women/Baghdad University, which aimed to identify the effect of alcoholic plant extract ,the MIC was determined 50Mg/ml and studied with two concentration (100 ,150 Mg/ml) on different microorganism(*Eschereshia coli*, *Staph.aureus*, *Klebsiella pneumonia*, *Salmonella typhi* ,*Bacillus subtilus* ,*Pseudomonous aeurogenosa* and *Candida albicana* .

The concentration 150mg/ml of the alcoholic plant extract was superior with an inhibition zone measuring (20.25, 17.80,26.25,20.25,17.15 mm) for (*E-coli* , *S.aureus* , *pneumoniae K.pneumonia*, *S. typhi* and *P.aeurogenosa*) respectively whereas the concentration 100 mg/ml of the alcoholic plant extract was significant for bacteria *B. subtilus* and in *C.albicana* yeast with zone of inhibition (17.15and 17.90mm) respectively compared with negative control .

Also an antimicrobial culture and sensitivity test was studied as a positive control using Tetracyclin and Amoxycillin, the concentration (150mg/ml)of tetracyclin gave the highest zone of inhibition in *E-coli* , *S.aureus* and same concentration of amoxicillin gave the highest inhibition zone in *S. typhi*, *P.aeurogonas*,while the same concentration of the alcoholic plant extract gave a wider diameter of inhibition zone for the same bacteria compared to the positive control.