

Table 2: Antibacterial activity of reference drugs against standard microorganisms

Drugs	M. D. I. Z. (mm)**			
	B.s	S. a	E. c	Ps. a
Ampicillin 10µg/disc	*	0.0	0.0	0.0
Gentamicin 10µg/disc	*	14	15	13
Genamycin 50 µg/ml	25	32	28	30

* = not tested with Ampicillin and Gentamycin at 10µg/disc.

B.s = *Bacillus subtilis*; S.a = *Staphylococcus aureus*; E.c = *Escherichia coli*

Ps.a = *Pseudomonas aeruginosa*

** M. D. I. Z. (mm) = Mean diameter of growth inhibition zone (mm).

5. Phytochemical Screening

Table (3) showed the presence of alkaloids, flavonoids and tannins on both leaf and callus extracts. These secondary metabolites could be responsible for the antimicrobial activity exhibited by many medicinal plants belonging to various families. These confirm the findings of Sharma and Shama [15]; they stated that antimicrobial activity was higher in naturally grown plant and the plants that rich with metabolite such as flavonoids, phytosterols and alkaloids develop great bactericidal and fungicidal activity.

Table 3: Preliminary screening for secondary metabolites of *Datura stramonium* leaf and leaf derivative callus

Test	Callus	Leaves	Observation
Alkaloids	positive	Positive	Turbidity and precipitate
Flavonoids	positive	Positive	Yellow color
Tannins	positive	Positive	Blue – green color

References

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