Long before people realized that bacteria existed, people utilized plants to cure common infectious disorders, and the notion that some plants had therapeutic properties was well acknowledged.This study aimed to evaluate the antibacterial activity of a leaf extract (Azadirachta indica, also known as neem leaf) against a variety of pathogenic bacteria (E. coli) and (s. aureus).The microorganism was activated by inoculating a loopful of the strain in the nutrient broth (25 ml) and incubating it at room temperature on a rotary shaker.First, the microorganism was distributed evenly 0.2 mL (inoculum size of 108 cells/ml as per the McFarland standard) Each of the Nutrient agar media was inoculated with the microorganism.In our antibacterial assay, we evaluated the inhibitory effects of plant extracts on Staphylococcus aureus and Escherichia coli.It is well known that A. indica leaf, bark, and seed have antibacterial and anti-fungal properties against a variety of pathogenic pathogens.Additionally, two extracts from the Neem plant were employed(evaporation of ethanol extract and the filtration of H2O extract).Furthermore, it provides a variety of medicinal compounds that are employed in conventional treatment.Two Petri dishes were used, each containing one type of microorganism, which were (Staphylococcus aureus and Escherichia coli) .The test compound was introduced into the well and all the plates were incubated at 37oC for 24 h. Finally, the antibiotic disk tetracycline was used for each Petri dish.Neem, or Azadirachta Indica, is a multipurpose tree that offers several health advantages.The reason for this is that a number of common and less priced antimicrobial treatments are becoming less effective because microbes are becoming resistant to these drugs.Thirdly, For the agar disk diffusion,the test compound was introduced onto the disk (7 mm) (Hi-Media) and then allowed to dry.Thereafter, the disk was impregnated on the seeded agar plate.Firstly, the bacteria are distributed inaccurately in the agar.The bacterial strains may also be resistant, and the incubation time or temperature may not be sufficient.It has been demonstrated that several plant parts have antibacterial properties against a broad range of microorganisms.It was properly homogenized using an L-shaped spreader, which had to be placed next to the spirit lamp to avoid contamination.Secondly, Two methods, disk diffusion and well diffusion, were used.Fourthly ,For the agar well diffusion: a well was made in the seed plates with the help of a cork-borer (8.5 mm).Secondly, the well placement and filling with extracts are imprecise.Based on our results, it's evident that we're getting incorrect outcomes for several reasons.(Rios and Recio, 2005).(Montefore et al., 1989).Over time, there has been a growing interest in the use of plant extracts to cure illness.

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