tical values indicating no significant difference in means and variances of results obtained by either of the proposed methods. Both proposed methods produce comparable results and can be used for precise and accurate analysis of etoricoxib in its dosage forms. Interference studies revealed that the common excipients and other additives usually present in the dosage forms did not interfere in both the proposed methods. The values of standard deviations were satisfactory and % recovery was close to 100 % indicating the reproducibility and accuracy of both the methods. Both proposed methods can be employed as a quality control tool for the analysis of etoricoxib in bulk drug and its dosage forms.

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Studies on the Antimicrobial Activity of *Cadaba indica* Lam

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Leaves of *Cadaba indica,* family Capparidaceae were extracted with petroleum ether, chloroform, ethanol and water. The crude extracts were investigated for its antibacterial activity against *Escherichia coli, Staphylococcus aureus, Bacillus subtilis* and antifungal activity against *Candida albicans, Candida krushi.* The extracts showed significant antibacterial and antifungal activity in the order ethanol, water, chloroform, petroleum ether against all the microorganisms tested and the effect so produced was compared with the standard drugs ampicillin and cotrimoxazole. However, the antibacterial, antifungal activity of the ethanol extract of the leaves was found to be most effective against all the organisms.

Cadaba indica (Capparidaceae) is an unarmed, branched shrub up to 3 m height. Leaves simple or trifoliate, size- 12-15 by 8-12 mm, entire, elliptic, oblong or ovate, muccronate dull green. It is locally called as kattagatti, villi and medicinally used for treating skin diseases, uterine obstruction, anthelmentic, purgative, deobstruent, emmenagogue and antisyphillictic[1]. The leaves of the plant are rich in lactones, steroids, flavonoids, alkaloids, reducing sugar and tannins[2-4]. The present study was taken up to evaluate antibacterial and antifungal activity of the petroleum ether, chloroform, ethanol and water extracts of the leaves of *C. indica.*

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C. indica plant was collected from outskirts of Trichy district, Tamil Nadu in the month of June, identified from the

TABLE 1: ANTIMICROBIAL ACTIVITY OF LEAF EXTRACTS OF *CADABA INDICA* LAM

Extracts	Concentration (mg/ml)	Diameter of zone of inhibition (mm)				
		E. coli	*S. aureus*	*P. aeruginosa*	*C. albicans*	*C. krushi*
Petroleum ether	1	9.5	7	-	8	7
	2	10	9	-	10	8.5
Chloroform	1	20	18	16	19	16.5
	2	21.5	19	16	20.5	18
Ethanol	1	22	21	16.5	22.5	20
	2	25	23	19	24	21.5
Water	1	23.5	20.5	14	21	15.5
	2	25	22	17	23	19
Ampicillin	1	28.5	26	23.5	-	-
Cotrimoxazole	1	-	-	-	33	29

Department of Plant Sciences, Bharathidasan University, Trichy and a voucher specimen was submitted to the herbarium. The leaves were air dried and powdered, and subjected to successive extraction in a Soxhlet apparatus using petroleum ether, chloroform, ethanol, and water. Solvent recovery under reduced pressure afforded the leaf extract and the extractive values for various solvents are chloroform (3.7% w/w), petroleum ether (5% w/w), ethanol (4% w/w) and water (12.5% w/w), respectively.

The antimicrobial activity[5] was evaluated by the agar well diffusion method employing 24 h subcultures of different test organisms, *Pseudomonas aeroginosa, Escherichia coli* (ATCC 25922), *Staphylococcus aureus* (NCTC 6571), *Candida albicans* and *Candida krushi.* All organisms were obtained from the Department of Pharmaceutical Technology, Jadavpur University, Kolkata and all the remaining organisms were available in the department. They were clinical isolates collected from different hospitals in Kolkata and identified by the methods described by Barrow and Feltham.

The test organisms were seeded into sterile nutrient agar medium/Sabouraud's Dextrose Agar (SDA) medium by uniformly mixing 1 µl of the inoculum with 20 ml of sterile melted nutrient agar cooled to 48 to 50° in a sterile petri dish. After solidification, four wells were made in the medium with the sterile cork borer, three for the extract and one for the standard drug. The extracts of various concentrations either 1 mg/ml or 2 mg/ml (0.1 ml) or standard drugs i.e., ampicillin or cotrimoxazole at a concentration of 1 mg/ml (0.1 ml) were added to the wells. Agar medium was used for antibacterial activity and SDA medium was used for antifungal activity. The plates were then maintained at room temperature for 2 h to allow the diffusion of the solution in to the medium. The zone of inhibition was measured after incubation at 37° for bacteria after 24 h and for fungi after 48h.

Results of preliminary antifungal and anti bacterial screening of petroleum ether, chloroform, ethanol, and water extracts of *C. indica* leaves have been tabulated in Table 1. The extracts showed significant activity against all the organisms when compared with against the standard drugs. The activity of the extracts against the organisms were in the order ethanol > water > chloroform > petroleum ether. The zone of inhibition formed was proportional to the concentration. Ethanol extract showed maximum activity amongst all the extracts.

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