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All samples analysed revealed the presence of *P. aeruginosa*. Detection was carried out in the asparagine enrichment broth at 37°C after 24 or 48 hr of incubation by viewing the fluorescence under the long wave ultraviolet light (366 nm) and subsequently by the confirmatory test with acetamide broth. A colour transformation from orange to pink confirmed the presence of *P. aeruginosa*.

The cell numbers of *P. aeruginosa* computed using the MPN technique show that *P. aeruginosa* was present in all the hospital samples, though the numbers vary considerably (figure 1a). *P. aeruginosa* was least abundant in hospital No. 12 and the level was 7×10^5/100 ml. The highest number (9.2×10^8/100 ml) (figure 1a) was found in the effluent collected from hospital No. 9.

Of the domestic samples examined, *P. aeruginosa* was again present in all the samples with considerable variation in the number. Least abundance of

ECOLOGY OF *PSEUDOMONAS AERUGINOSA* (SHROETER) MIGULA IN HOSPITAL AND DOMESTIC EFFLUENTS OF MADRAS CITY

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PSEUDOMONAS AERUGINOSA is a water-borne bacterium, pollutant and a human pathogen[1–6]. In this study an attempt has been made to study the quantitative distribution of the organism in domestic and hospital effluents collected from different locations of Madras city.

Two types of tests (presumptive and confirmative tests[7]) were routinely used in the detection and enumeration of *P. aeruginosa* from the effluent samples.

The bacterial numbers from these tests were estimated by the most probable number (MPN) technique. Twenty hospital and twenty non-hospital (domestic) locations in the city were chosen for sampling. The samples from hospitals were collected from the common sewage out-let. The domestic samples were collected from outlets of kitchen or toilet. The samples were collected by the grab sampling method[8].

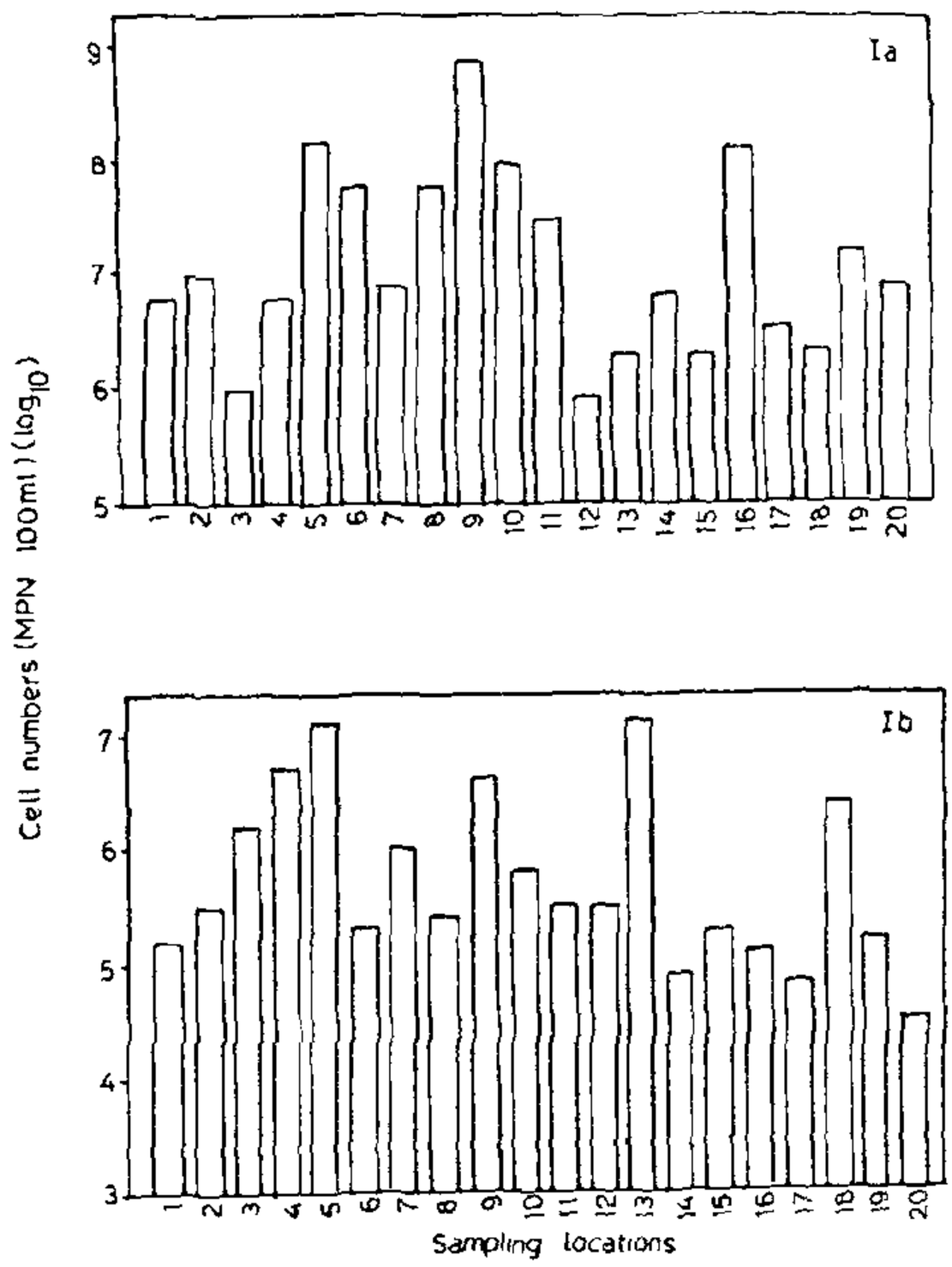

Figure 1. Population of *Pseudomonas aeruginosa* in hospital (**a**) and non-hospital (**b**) effluent samples. Cell numbers were estimated using the MPN technique on selective media.

P. aeruginosa was found in sample No. 20 (3.9×10^4/100 ml) while the highest number (figure 1b) was in sample No. 13 (1.4×10^7/100 ml).

This study has revealed that *P. aeruginosa* is abundant in the Madras city environment. *P. aeruginosa* was present 10^6 or more cells per 100 ml of samples examined from the hospital effluents. This should be considered a higher level of contamination when one bears in mind that *P. aeruginosa* is a highly harmful bacterium. Such a level of contamination with *P. aeruginosa* will contribute to added levels of human infections. It is significant that all the samples collected from households also show the occurrence of *P. aeruginosa*. It appears therefore that this bacterium is a common pollutant of the city environment and may involve in causing infections at homes.

The authors thank Dr Sundarraj, Department of Microbiology, Post Graduate Institute of Basic Medical Sciences, Tharamani for his assistance.

12 December, 1984; revised 19 August 1985

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TRAMETES MENZIEZII (BERK.) RYV. IN INDIA

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DURING a mycological survey at Zero, Arunachal Pradesh, India in November 1981, several sporophores were collected on a stump of *Quercus* sp. These were identified as *Trametes menziezii* (Berk) Ryv, a species hitherto unrecorded from India[1, 2]. This fungus is briefly described in this note.

Morphology: Basidicarp (figure 1) annual, pileate, sessile or with a narrow base, imbricate, dimidiate or spathulate, 2.3–3.3 × 2.7–3.3 × 0.2–0.3 cm, tough when fresh, hard and brittle on drying; upper surface smooth, glabrous, ochraceous to reddish brown with numerous narrow concentric zones; margin thin, acute, entire, involute when dry; context creamish, corky, up to 0.1 cm thick; hymenial surface ochraceous to pale tan, spiny, spines narrow, conical, 0.1–0.2 cm long, 2–3 per mm.

Anatomy: Hyphal system trimitic; generative hyphae (figure 2A) hyaline with clamp connections, thin-walled, branched, 2–4 μ in diameter, mostly becoming collapsed in dried sporophores; skeletal hyphae

Figure 1. Basidiocarps of *Trametes menziezii* (Berk) Ryv growing on a stump of *Quercus* sp.