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ISOLATION OF *PROTEUS MIRABILIS* FROM FROZEN BULL SEMEN

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Proteus mirabilis has been incriminated in digestive and urinary tract infections of diverse species of animals.

In the present study *P. mirabilis* was isolated from frozen semen samples of a bull. The straws were supplied in frozen state, stored in liquid nitrogen, from samples having a total sperm count of 25–30 millions per dose initially and the volume of each straw was 0·5 ml extended with tris buffer containing antibiotics in standard volumes. These samples were conducted for viable count and bacterial isolation following standard techniques.

The samples were thawed and processed immediately for bacterial load by pour plate technique and typing of bacteria involved (Cruickshank[2]). The viable count was within the standard limit (290 colonies per ml of extended semen) prescribed for frozen samples. The samples, when streaked on blood agar plates and incubated for 24 hrs at 37° C under aerobic conditions, yielded non-haemolytic grayish white, swarming colonies. The organisms were gram negative rods, motile, non-sporulating and non-capsulated. Using specific biochemical and sugar fermentation tests the isolate was typed out as *P. mirabilis* (Buchnan and Gibbons[1]).

P. mirabilis is a common causative agent of cystitis in man and animals (Wilson and Miles[5]). Although it is not possible for us to discuss the exact role of this organism in genital disturbances of cattle, it is important to take cognisance of its association with fertility and early abortions in thorough-bred mares and transmission of the agent through semen (Driscoll[3]). Besides this, *P. mirabilis* produces a potent endotoxin which is shown to cause abortions in animals (Roberts[4]) viewed from this angle the isolation *Proteus mirabilis* from frozen semen samples are made as routine to determine its flora and correlated this with the percentage of conception of cows after insemination.

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ANOPHELES SUBPICTUS, VECTOR OF MALARIA IN COASTAL VILLAGES OF SOUTH-EAST INDIA

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Anopheles subpictus is a ubiquitous mosquito, widely distributed in South-East Asian countries[1]. This species has been incriminated as a vector of malaria in Maldive Islands[2], Portugese Timor[3], South Java[4], Celebes[5] and is suspected as a vector in Lakshadweep Islands[2]. So far, there is no clear evidence of this species playing a definite role in malaria transmission in India. Evidence is presented here to incriminate this vector definitely in the transmission of malaria in coastal villages of Pondicherry and Tamil Nadu, where malaria has been persisting for some years. In one of the villages, Pudukuppam, where extensive studies are being carried out, there were 33 malaria positive cases in 1978, 72 in 1979, 150 in 1980 and 156 during the period January to June, 2981. A mass blood survey was carried out in this village in May 1981 and 35 positives were recorded out of 610 blood smears examined. The anopheline mosquito fauna recorded in the village are *A. subpictus*, *A. vagus*,