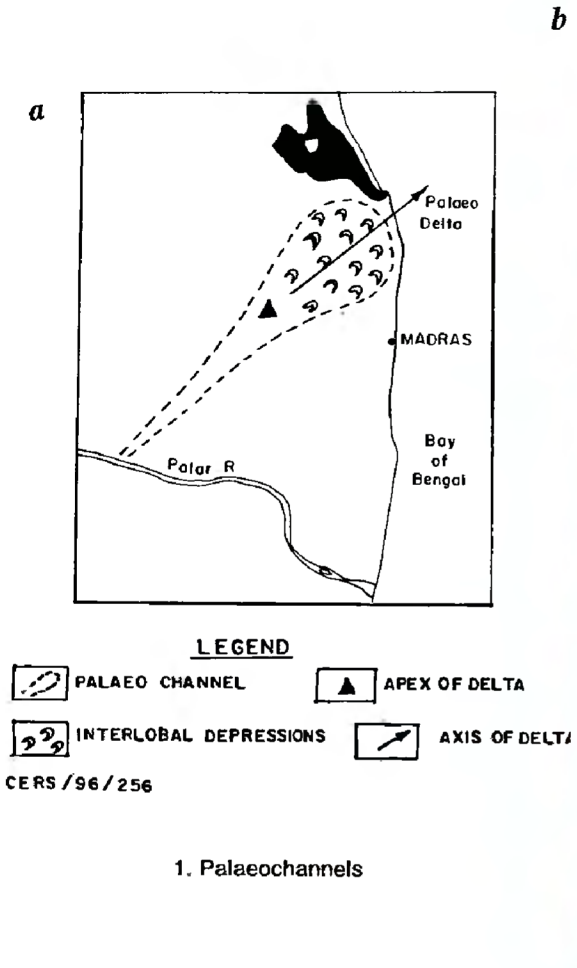

1. Palaeochannels

Figure 2.

proto Cauvery delta confirms that this delta might have extended up to 20–30 km inside the continental shelf in the area each of Pulicat lake.

Thus the present study reveals the possibility of utilizing blue/red band of the IRS data in ocean bathymetric mapping. In addition, the present study clearly demonstrates the existence of a huge submarine delta east of Pulicat lake, confirming the flow of the mighty Cauvery river in this region in the recent past.

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A new overlay in virological work for animal viruses

Virus assay by plaque method is a basic need in virus laboratories. The virus assay system by plaque method needs pure chemicals. The overlay ingredients/chemicals should not be toxic either to the host system or inhibitory to the virus. Various overlay materials such as agar, agarose, carboxymethyl cellulose, methocil and paraffin oil are

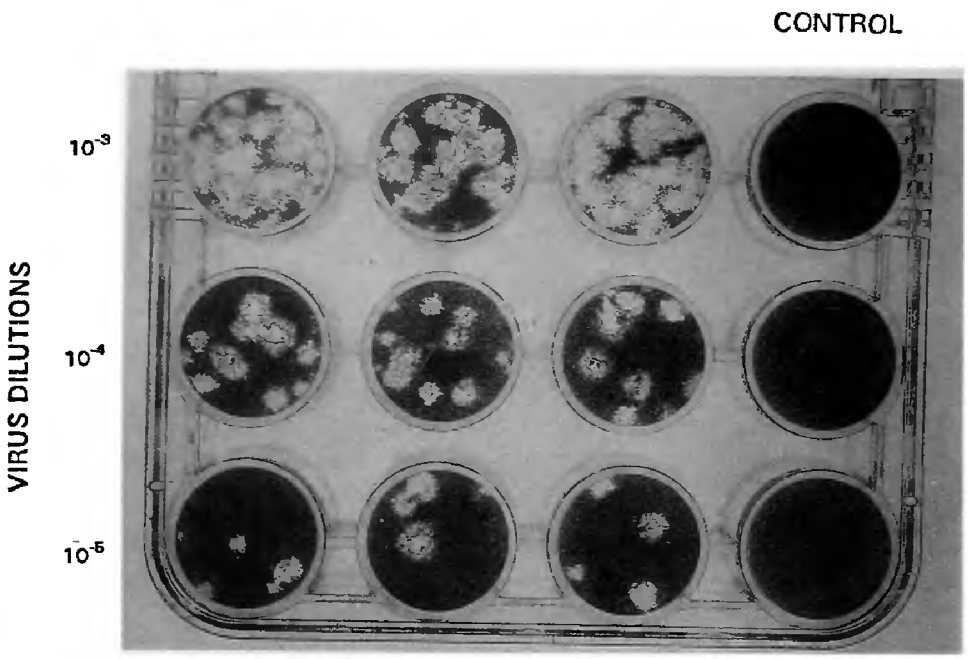

Figure 1. Japanese encephalitis (JE) virus plaques in PS cells under sago overlay showing plaques in different virus dilutions. Control wells without virus.

used extensively. Nene *et al.*'s article provided the inspiration for the present study[1]. Sago was purchased from local market and was used as an overlay on the cells. The sago was powdered in the grinder and stored in a cool and dry place. 7 g of the sago powder was suspended in distilled water and the suspension was mixed on magnetic stirrer for 15 min. This suspension was sterilized by autoclaving 10 lbs/10 min and stored at +4°C. Vero cell monolayers were grown in 24 well plates (Linbro), infected with different viruses like Chandipura, Chikungunya, Japanese encephalitis, polio, etc. and adsorbed for 30 min at 37°C. The plates were washed with medium and one ml of the overlay was added. The overlay composition was as follows:

(i) Sterile sago 7% in distilled water, 50%, (ii) Sterile 2X MEM, 50%; (iii) FCS, 2%.

The plates were incubated in 5% CO_2 atmosphere for appropriate time and the overlay was removed by pouring it in a discarding pan. The wells were rinsed with normal saline and fixed in formal saline for 30 min; after fixation the wells were washed with tap water and stained with 0.1% crystal violet for 30 min and the plates were washed with tap water.

The plaques of these viruses were clear (Figure 1) and there was no inhibitory effect of sago on plaque formation. The only drawback in this overlay was that, it is not as transparent as agar or agarose, however, the cost effectiveness and routine Plaque Reduction Neutralization Test (PRNT) work in virology can be done at low cost. Another advantage is that, this overlay does not require heat to melt, so that many thermolabile viruses can be easily handled without any loss. Our study corroborates the views expressed by Nene *et al.* regarding the cost effectiveness and other beneficial qualities of sago (tapioca).

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