

THE DISTRIBUTION OF COPEPODS IN SOME PONDS IN THE  
JAFFNA PENINSULA

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In the peninsula six ponds were chosen. They were at Neeraviady, Paravaikulam, Pavilionkulam Aariyakulam, St. Patricks College and Nariankundu.

This study was carried out from January to June 1986. Analysis of plankton samples was done every five days. Chemical and physical analysis were done once a month.

Two types of copepods were found in these ponds, they were calanoids and cyclopoids. In cyclopoid form, Mesocyclops leuckarti was found in all ponds and in calanoid forms, Rhinodiatomus indicus was found in the Vaddukoddai pond and Paradiaptomus greeni was found in the Neeraviady and Aariyakulam ponds.

Among physical factors, average temperature was observed between 32.6°C and 28.5°C. The pH ranged between 6.0 - 7.0 in all ponds. Water was clear in the early part of the study from January to March. During the rest of the period of study from April to June, water was turbid.

The following observations were made:

(a) Average salinity was Pavilionkulam 0.501 ppt, Paravaikulam 0.132 ppt, Aariyakulam 0.367 ppt and Neeraviady pond 0.589 ppt. (b) Average O<sub>2</sub> content was Pavilionkulam (Vaddukoddai)  $9.7 \times 10^{-6}$  ppm, Paravaikulam  $3.9 \times 10^{-6}$  ppm, Aariyakulam  $4 \times 10^{-6}$  ppm and Neeraviady pond  $5.6 \times 10^{-6}$  ppm. (c) Average N<sub>2</sub> content was Pavilionkulam  $1.4 \times 10^{-6}$  ppm, Paravaikulam  $7 \times 10^{-6}$  ppm, Aariyakulam  $9 \times 10^{-6}$  ppm and Neeraviady pond  $9 \times 10^{-6}$  ppm. (d) Average CO<sub>2</sub> content was Pavilionkulam  $2.2 \times 10^{-5}$  ppm, Paravaikulam  $2.08 \times 10^{-5}$  ppm, Aariyakulam  $2.9 \times 10^{-5}$  ppm and Neeraviady pond  $2.3 \times 10^{-5}$  ppm.