

## Abstract

Between May and November 2002, stools samples from 429 inhabitants on Lanyu were examined by MIF, FEA, and a modified acid-fast staining technique for intestinal parasitic infections. Of the subjects examined, 110 were found to be positive and the overall infection rate was 25.6%. The infection rate of adult inhabitants (52.0%) was significantly higher than that of the school children (22.3%) and there was no significant differences between the rates of males (23.9%) and females (27.7%). Eight species of intestinal parasites were found. These included 5 protozoa, 2 nematodes, and 1 tapeworm: *Cryptosporidium* sp. 16.6%, *Giardia lamblia* 4.7%, *Blastocystis hominis* 3.5%, *Entamoeba coli* 1.9%, *Trichuris trichiura* 0.9%, *Endolimax nana* 0.7%, *Strongyloides stercoralis* 0.5%, *Taenia saginata asiatica* 0.5% ? HHHHHC The percentages of single and double infections were 22.1% and 3.5%, respectively.

The epidemiological factors of intestinal parasitic infections were determined based on the results of stool examination and questionnaire survey. Although there were no significant associations between history of diarrhea, hand washing before meals and after going to toilet, drinking water source and boiling, rearing domestic animals and pets, or using flush toilet and cryptosporidiasis, giardiasis, or blastocystiasis, there were significant differences in the infection rates of cryptosporidiasis and blastocystiasis among schools. Moreover, significant differences were also found in the rate of blastocystiasis among villages. Some of the school children on Lanyu still have the habit of eating raw meat and vegetables: 10.1% has consumed raw pork and 2.7% raw mutton. These eating habits were found to be varied among villages. The overall rate of *Enterobius vermicularis* infection in kindergarten and primary school children was 11.9%. Although the boys had a higher positive rate (13.7%) than the girls (9.6%), this difference was not statistically significant. The children in Lan-An Kindergarten had the highest rate of pinworm infection (55.6%). The overall rate of head louse infestation in the school children was 22.8%. The girls (36.5%) had a significant higher rate than the boys (11.6%) and the highest rate (52.2%) was found in Lang-Tao Primary School.

**Keywords :** Amebiasis ; taeniasis ; Lanyu Island ; *Enterobius vermicularis* ; head louse ; epidemiological study ; intestinal parasites