J Infect Dis Ther 2018, Volume 6
DOI: 10.4172/2332-0877-C3-045

Profile of geohelminth eggs, cysts, and oocysts of protozoans contaminating the soils of ten primary

Vanessa Rosine Nkouayep
University of Dschang, Cameroon

Soil-transmitted infections are neglected tropical diseases that refer to the traditional lack of attention paid to these infections by research communities, while they are the second leading cause of death among children under six in Africa. The purpose of this study was to evaluate the risks of parasitic infection of school-age children through the soils of 10 primary schools in Dschang. To allow for specific conclusions, 400 soil samples collected around latrines, at playgrounds, and behind classrooms in each school were analyzed using the sucrose flotation method. From the results obtained, an overall contamination rate of 7.75% was observed. Five genera of nematodes (Ascaris, Trichuris, Capillaria, Cooperia, and hookworms) were identified, while neither cysts nor oocysts of protozoans were detected. The contamination rate and the number of species found were significantly different in the wet season as compared to the dry season. During the rainy season, this rate was 12.5% with all the parasitic stages identified, while, in the dry season, the soil contamination rate was 3% with the presence of only two genera (Ascaris and Trichuris). Also, the soils around latrines were more contaminated (11.9%) as compared to those collected behind classrooms (7.5%) and those at a playground (2.5%). Pupils of these schools may have played a major role in the contamination of their environment. Thus, sanitary education and deworming remain a necessity in the entire population of the study area in order to prevent helminth infections and to ensure effective environmental health.

vanessa.nkouayep@gmail.com