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Characterization of *Cryptosporidium* spp. by isoenzyme electrophoresis.

by PJ O'Donoghue [1], R Lumb [*2] and R Andrews [3].

Central Veterinary Laboratories, Department of Agriculture, Adelaide, 5001 [1], Division of Clinical Microbiology, Institute of Medical and Veterinary Science, Adelaide, 5001 [2], and Department of Microbiology and Immunology, The University of Adelaide, Adelaide, 5001 [3].

Cryptosporidium spp. are protozoan parasites that infect mucosal epithelial cells of mammals, birds, reptiles and fish. Infections by *Cryptosporidium* may cause acute, self-limiting gastroenteritis in immunocompetent individuals, or a prolonged debilitating illness in immunocompromised hosts that contributes significantly to morbidity and occasionally death. In comparison to closely related coccidia such as *Sarcocystis* or *Eimeria* spp. where species display marked host specificity, *Cryptosporidium* appears readily able to cross host specificity barriers. Cross-transmission studies have demonstrated apparent strain differences or differences in the host specificity of several mammalian and avian isolates for homologous vertebrate classes only.

The aim of the present study was to compare *Cryptosporidium* isolates by isoenzyme electrophoresis. Oocysts were harvested from the faeces of 16 humans (*Homo sapiens*), three calves (*Bos taurus*), one goat (*Capra hircus*), two snakes (*Pseudonaja affinis*, *Oxyuranus scutellatus*) and four quail (*Coturnix coturnix*). Of the 55 enzymes screened, excellent staining was obtained for 17, and some reactivity was observed with another 16 enzymes. The results indicate that *Cryptosporidium* exhibit considerable genetic diversity within and between different host species. No genetic evidence was found to support the classification of *Cryptosporidium* spp. according to host vertebrate class or oocyst morphology.