

C47: HAEMOPROTOZOAN PARASITES OF TORTOISES IN SOUTHEAST QUEENSLAND

Jakes KA, O'Donoghue PJ & Adlard RD*

Dept. Microbiology and Parasitology, The University of Queensland, Brisbane, Australia

*Protozoa Section Queensland Museum, South Brisbane, Australia.

Chelonians belong to an ancient group dating back 200 million years to the Jurassic era. Consequently, their haemoparasites are of great importance from an evolutionary perspective. Since the early descriptions of haemoparasites of Australian chelonians were given 40-70 years ago, little additional research has been conducted on them. A survey of 27 freshwater tortoises in SE Queensland revealed that 96% were infected with haemoparasites; 93% (25/27) with the adelorine coccidian *Haemogregarina*, 30% (8/27) with the haemosporidian *Haemoproteus*, and 41% (11/27) with the kinetoplastid flagellate *Trypanosoma*. Hosts examined included three eastern long-necked tortoises, *Chelodina longicollis*, nine saw-shelled tortoises, *Elseyia latisternum*, and 15 Brisbane River tortoises, *Emydura signata*. The extent of morphological variation suggested that multiple species of each genus may be present but morphotypic characters were indeterminant. Consequently, genetic characterisation techniques are being used to examine phylogenetic relationships (18S rDNA) and species variation (ITS regions). Preliminary analyses support the occurrence of multiple species.