10. HAEMOGREGARINES OF BROWN TREE SNAKES (BOIGA IRREGULARIS) IN QUEENSLAND

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A haematological survey of brown tree snakes was conducted in northeastern Australia, and some southwestern Pacific Islands. Brown tree snakes are considered to be a pest species outside of their natural Australian home range. Haemogregarine infections were found in 32/89 (36%) snakes from mainland Australia, and in 0/35 (0%) snakes from Pacific Islands. Light microscopy revealed considerable morphological variation in haemogregarines beyond that which occurs for micro and macro (male and female) gamonts. Species descriptions based solely on gamont morphology are not considered to be reliable. Electron microscopy was conducted on intraerythrocytic gamonts, and typical apicomplexan zoites were found to be located within parasitophorus vacuoles. Additionally, curious thick-walled zoites were detected within the cytoplasm of red blood cells, but it is not yet known whether these zoites represent alternate, aged or degenerating developmental stages, or another parasite species.