



# Voorlopige resultate oor biodiversiteit van Suid-Afrikaanse amfibiese bloedparasiete

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**Preliminary results on the biodiversity of South African amphibian blood parasites.**

Studies have shown that frogs host a diversity of parasites. At present hardly any information exists on blood parasites or haematozoans parasitising South African frogs. The aims of our study were: (1) documenting blood parasite diversity, (2) providing host and locality records of described and new haematozoan species and (3) describing new parasites using morphometrics and DNA analysis. Fourteen species were found to be infected with haematozoans: 11/14 (79%) with haemogregarines, 6/14 (43%) with trypanosomes, 1/14 (7%) with babesiasomes, and 1/14 (7%) with microfilaria. It is hoped that these and future results may increase the knowledge of apicomplexan parasites of amphibian hosts in South Africa.

Dit is bekend dat paddas 'n verskydenheid parasietspesies huisves. Daar is egter baie min literatuur oor bloedparasiete en hematosoë wat op paddaspesies parasiteer. Die oogmerke van ons studie was om (1) parasietdiversiteit te ondersoek, (2) gasheer en lokaliteit data te dokumenteer vir reeds bestaande en nuwe spesies en (3) nuwe bloedparasietspesies te beskryf met behulp van morfometriese afmetings en filogenetiese analise. Paddas is snags deur middel van aktiewe versamelingsmetodes gevang. Bloed is verkry deur die femorale arterie met 'n insulienspuit te prik. Dun bloedsmeerfilms is voorberei, gedroog, gefikseer in metanol en met Giemsa-kleurstof gekleur. Hoë resolusie foto's van die parasiete is met behulp van 'n Nikon Eclipse E800 by 100x olie-emersie vergroting verkry. Tot dusver is 25 paddaspesies vanuit vyf lokaliteite ondersoek, naamlik Drakensberg, Ndumo Natuurreservaat, Phongolo vloedgebied (Kwa-Zulu Natal), Potchefstroom (Noordwes) en Kaapstad (Westelike Provincie). Veertien paddaspesies is deur hematosoë geïnfekteer: 11/14 (79%) met haemogregarine, 6/14 (43%) met tripanosome, 1/14 (7%) met babesiasome, en 1/14 (7%) met mikrofilarië. Die einddoel van hierdie studie is om die kennisbasis van Suid-Afrikaanse Apicomplexa-spesies wat amfibieë infekteer, uit te brei.