

Dr Sonja Matthee



I completed my post graduate training in 2000 in the Department of the Veterinary Tropical Diseases, Faculty of Veterinary Science at Pretoria University. I have always been interested in animal diseases and parasites. More recently I have started to research various aspects pertaining to parasite ecology and have included regional scale phylogeographic patterns.

My interest is macroparasites, but we are also conducting projects on viruses, protozoa and bacteria. The target host species mainly include rodents and insectivores. I am fortunate to have an extended network of collaborators from across the globe, who is involved in my research programme. My personal feeling is that a multidisciplinary research approach facilitates high quality and often novel research, with the potential for cutting-edge peer-reviewed publications.

Current students:

MSc:

Tanya Kerr
Karlien Malan

PhD:

Nina du Toit
Adriaan Engelbrecht
Luther van der Mescht
Andrea Spickett

Recent publications

1. du Toit, N., Matthee, S. & Matthee, C.A. The sympatric occurrence of two genetically divergent lineages of sucking louse, *Polyplax arvicantis* (Phthiraptera: Anoplura), on the four-striped mouse genus, *Rhabdomys* (Rodentia: Muridae). *Parasitology* DOI: <http://dx.doi.org/10.1017/S003118201200217X>
2. Van Der Mescht, L., le Roux, P. & Matthee, S. 2013. Remnant fragments within an agricultural matrix enhance conditions for a rodent host and its fleas. *Parasitology*, 140: 368-377
3. Drexler, J.F., Corman, V.M., Müller, M.A., Maganga, G.D., Vallo, P., Binger, T., Gloza-Rausch, F., Yordanov, S., Seebens, A., Oppong, S., Adu-Sarkodie, Y., Lukashev, A.N., Schmidt-Chanasit, J., Stöcker, A., Carneiro, A.B., Maisner, A., Büttner, R., Kalko, E.K.V., Kruppa, T., Franke, C.R., Kallies, R., Nakoune, E., Reuskens, C., Hassanin, A., Krüger, D.H., Matthee, S., Ulrich, R.G., Leroy, E.M. & Drosten, C. 2012. A link between mammalian paramyxoviruses and bats. *Nature Communications*. 3:796.
4. du Toit, N., Jansen van Vuuren, B., Matthee, S. & Matthee, C. 2012. Biome specificity of distinct genetic lineages within the four-striped mouse, *Rhabdomys pumilio* (Rodentia: Muridae) from southern Africa with implications for the taxonomy. *Molecular Phylogenetics and Evolution*, 65: 75-86.
5. Krasnov, B.R., Stanko, M., Matthee, S., Laudisoit, M., Leirs, H., Khokhlova, I.S., Korralo-Vinarskaya, N.P., Vinarski, M.V., Morand, S. 2011. Male hosts drive infracommunity structure of ectoparasites. *Oecologia*, 166: 1099-1110.
6. Apanaskevich, D.A., Horak, I.G., Matthee, C.A. & Matthee, S. 2011. A new species of *Ixodes* (Acari: Ixodidae) from South African Mammals. *Journal of Parasitology*, 97: 389-398
7. Matthee, S., van der Mescht, L., Wilson, B., & Lamberski, N. 2011. Flea diversity on small carnivores in the Northern Cape Province, South Africa. *African Zoology*, 46: 27-31

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8. Matthee, S., Horak, I.G., van der Mescht, L., Ueckermann, E.A., & Radloff, F.G.T. 2010. Ectoparasite diversity on rodents at De Hoop Nature Reserve, Western Cape Province. *African Zoology*, 45: 213-224.
9. Krasnov, B.R., Matthee, S. 2010. Spatial variation in gender-biased parasitism: host-related, parasite-related and environment-related effects. *Parasitology*, 137: 1527-1536.
10. Matthee, S., Lovely, C., Gaugler, A., Beeker, R., Venter, H.R., & Horak, I.G. 2010. Ixodid ticks on domestic dogs in the Northern Cape Province, South Africa and in Namibia. *Journal of the South African Veterinary Association*, 81: 126-128.
11. Froeschke, G., Harf, R., Sommer, S. & Matthee, S. 2010. Helminth parasite diversity in rodents along a precipitation gradient. *Oikos*, 119: 1029–1039.
12. Matthee, S., McGeoch, M.A. & Krasnov, B.R. 2010. Parasite-specific variation and the extent of male-biased parasitism; an example with a South African rodent and ectoparasitic arthropods. *Parasitology*, 137: 651-660.
13. Krasnov, B.R., Matthee, S., Lareshi, M., Korralo-Vinarskaya, N.P., Vinarski, M.V. 2010. Co-occurrence of ectoparasites on rodent hosts: Null model analyses of data from three continents. *Oikos*, 119: 120-128.
14. Matthee, S. & Krasnov, B.R. 2009. Searching for generality in the patterns of parasite abundance and distribution: ectoparasites of a South African rodent, *Rhabdomys pumilio*. *International Journal for Parasitology*, 39: 781–788.

