



The School of Life Sciences

invites you to a seminar entitled:

Tannin mediation of plant-herbivore interactions in African Savannahs

presented by

Dr. Ntuthuko Mkhize

(Researcher, Agricultural Research Council - Animal Production Institute, Pretoria)

When

- Wednesday, 7 October 2015
- 12:20

Where

- Seminar Rooms
- Life Sciences Building, South Ring Rd, Westville Campus
- Coordinates: -29.817482,30.940305

Enquiries

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Dr. Ntuthuko Mkhize (7 October 2015)

Tannin mediation of plant-herbivore interactions in African Savannahs

The seminar

In this seminar I will give a general overview of how tannins mediate the ways in which mixed-feeders (e.g. goats) relate with their woody food resources. While most work on this question has focused on plant responses to herbivory, very little attention has been given to how herbivores adapt behaviourally and physiologically to plant chemical traits. My work has shown tannins not only to negatively affect the plant palatability and feed intake by herbivores, but to also influence the amount of time animals spend foraging either on grasses or woody plants. Very few studies have managed to experimentally test the effects of tannins on growth performance of free-ranging herbivores. I will share these results together with some ideas (new questions) on how current knowledge of how herbivores deal with plant chemistry could be used to increase or decrease utilisation/defoliation of chemically defended plants. I will conclude with a discussion on the implications that this work may have on the animal nutrition/health, environment and management of savannas that are dominated by woody plants.

Presenter Biography

Ntuthuko Mkhize holds an MSc in Agriculture (Animal Production) from the University of Zululand and recently (May 2015) received a PhD in Production Ecology and Resource Conservation from Wageningen University, the Netherlands. He has worked for the Agricultural Research Council (ARC) as a researcher in Rangelands Management and Ecology since 2008. Before joining the ARC, Ntuthuko spent two years working for the KwaZulu Natal Department of Agriculture and Environmental Affairs as an animal scientist. His research work is broadly on plant-herbivore interactions with special interest on the mechanisms that influence food selection and intake in large herbivores. He explores the principles that underlie foraging behaviour with the aim to obtain reliable knowledge on the plant species, parts, and chemicals that herbivores select while grazing, as well as why, how, and when specific foods are ingested. His ultimate goal is to develop more efficient alternatives for animal and rangelands management.



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