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Date of birth: 21 December 1989

Origin: Malmesbury, Western Cape, South Africa

Education: Hoër Meisieskool Bloemhof, 2007

BSc Conservation Ecology, Stellenbosch University, 2008 - 2011

My research topic:

*Acacia saligna* vs. *Virgilia divaricata*: Investigating the invasive potential of alien legumes in fynbos soils based on phosphorous requirements.

I started this study in January 2011 and my practical experiments will run until the end of May. In this study, invasive (*Acacia saligna*) and indigenous (*Virgilia divaricata*) legumes are used to determine the costs associated with seedling establishment. Nutrient solutions with a range of P levels are administered on a weekly basis and monthly measurements (such as costs of biomass production, photosynthetic and respiratory gas exchange, stable and radio-isotope analyses, biological nitrogen fixation via H<sub>2</sub> evolution and calculation of energy costs based on isotope and gas exchange) will be made.

As a young research scientist and conservationist, I think critically about fundamental aspects of physiological plant ecology and try to integrate them with topics in other disciplines. I have a strong sense of commitment toward the environment and society, and thus my chosen research project is to investigate the invasive potential of alien legumes in Fynbos soils based on their nutritional requirements. As a Conservation Ecology student I chose this topic to determine in which landscapes *Acacia saligna* will be able to replace *Virgilia divaricata* if it were to be introduced there. I specifically have made contact with the Harold Porter Botanical gardens in Betties Bay and wish to compare my findings with soil samples from their grounds.

I also firmly believe that approaches in physiology and nature conservation should be combined more often, with the two fields of research having aspects which is of mutual benefit to one another and the greater goal of understanding plant behaviour.

Regards

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