



Soil respiration at Skukuza

**Rudzani Makhado, R.J. Scholes, W
Kubheka and A Kirston**

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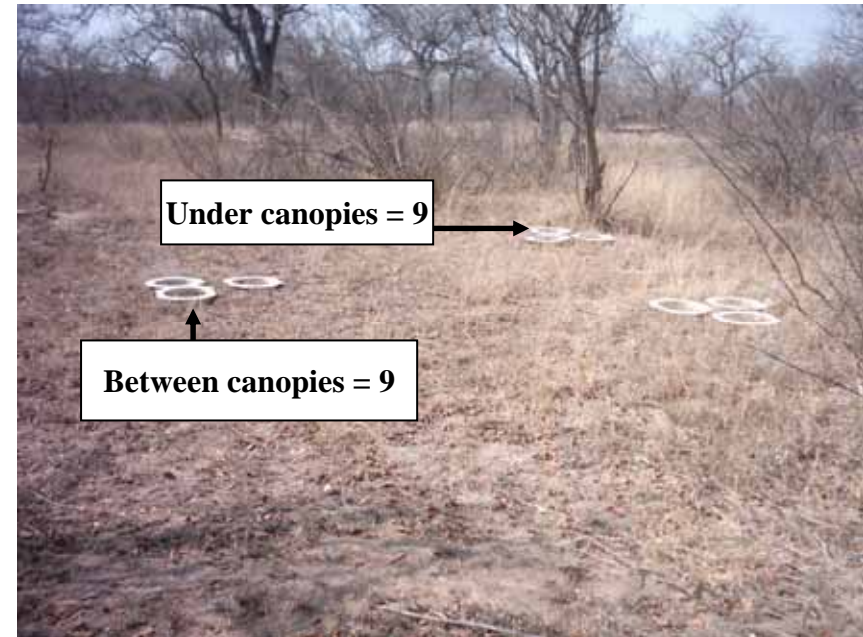
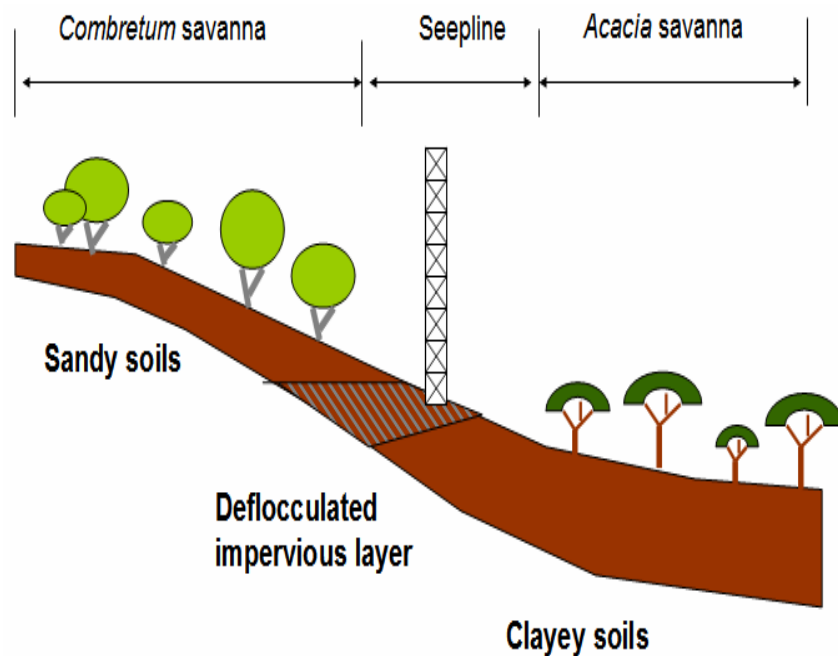
Introduction

- ❑ R_s is typically the main carbon flux from savanna ecosystems.
- ❑ R_s is sensitive to climatic variables (Davidson et al., 1998; Conant et al., 2004):
 - ❑ soil moisture
 - ❑ soil temperature
- ❑ R_s is proportional to the amount of organic matter that can be oxidised.

Aim

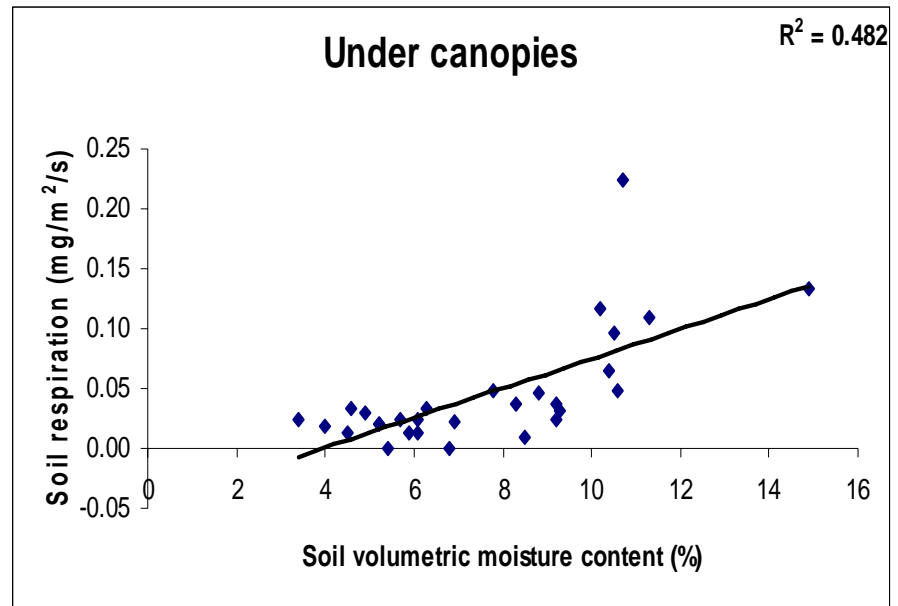
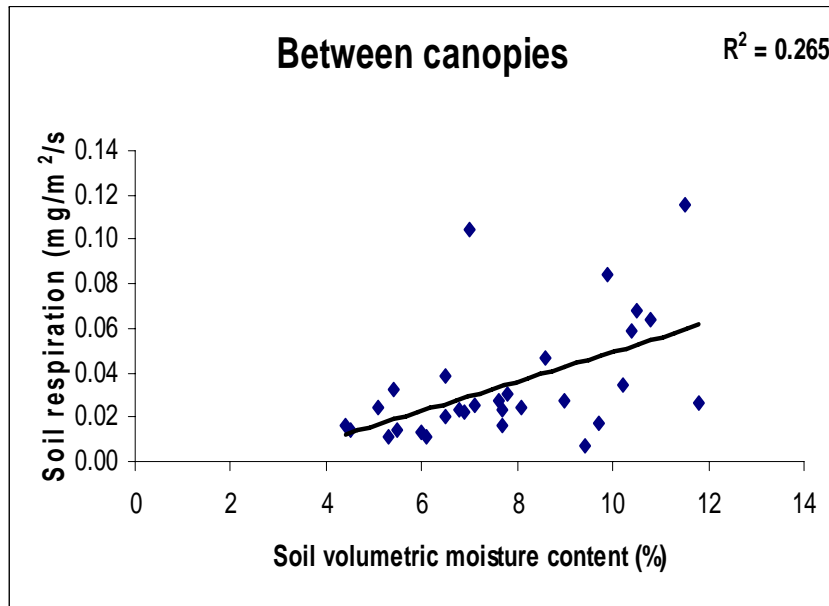
- ❑ Quantify the effect of soil moisture and temperature on the rate of soil CO₂ respiration.

Soil CO₂ respiration measurements

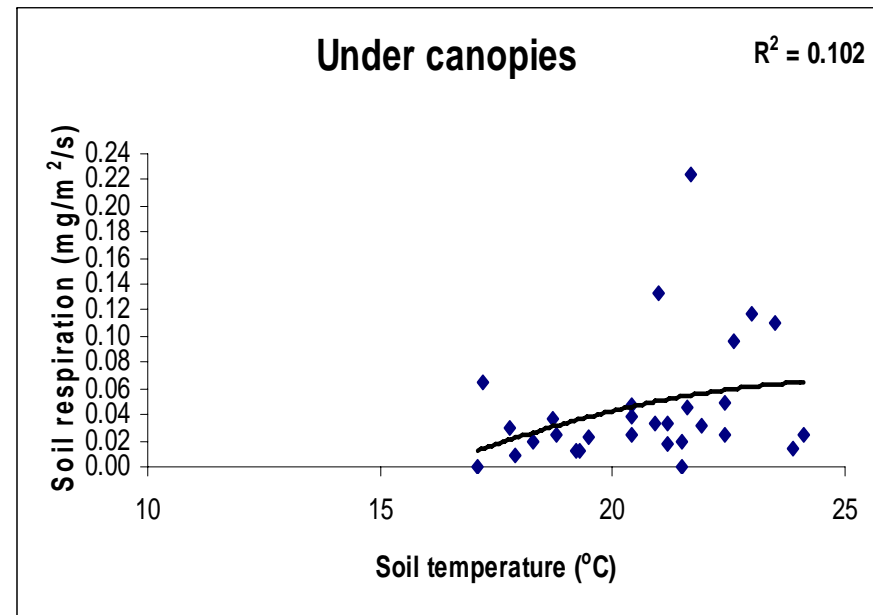
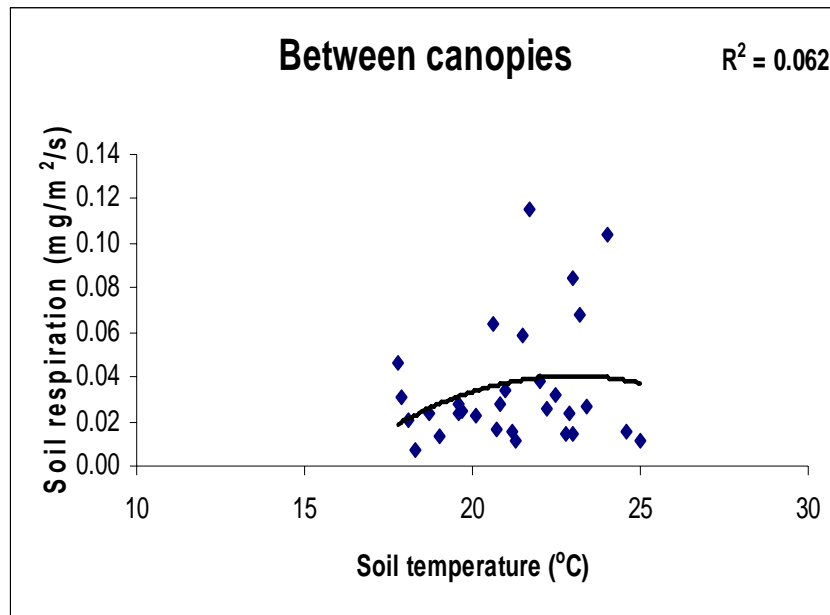


- Watered two weeks before & at the beginning of sampling period.
- Vaisala CO₂ probe – measure CO₂ respiration

Effects of soil moisture on the rate of soil CO₂ respiration



Effects of soil temperature on the rate of soil CO₂ respiration



Thanks

rmakhado@csir.co.za