

Emergence of *Hyparrhenia hirta* seedlings in *Hyparrhenia* dominated veld under burned and non burned conditions



Robin Ford¹, Gilbert H. Pule², Wayne F. Truter ^{1*} and Mike J.S. Peel²

¹Department of Plant Production and Soil Science, University of Pretoria, Pretoria

²Agricultural Research Council, Irene

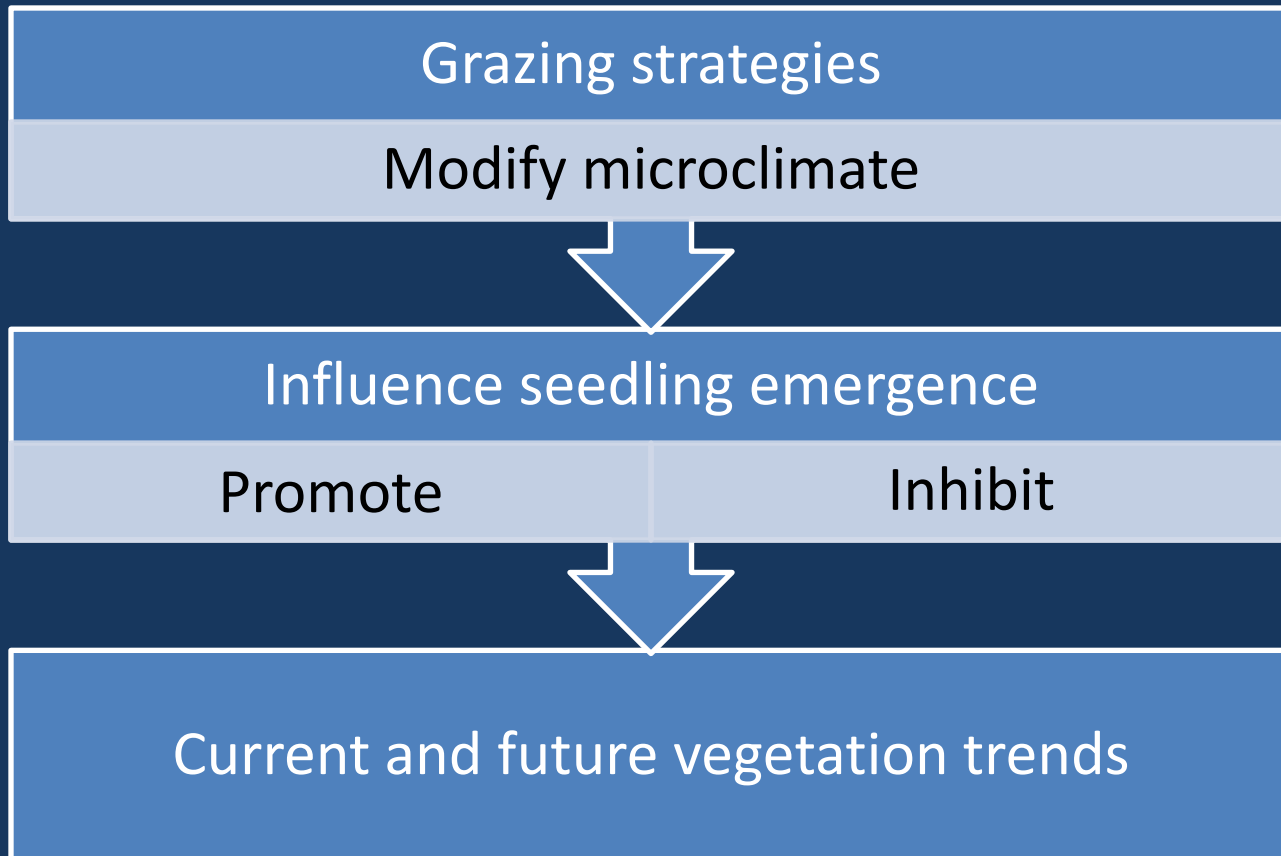
*Corresponding Author: wayne.truter@up.ac.za

Introduction

Various grazing management strategies are currently employed to utilize *H. hirta* veld more effectively.

- High utilization grazing (HUG) – kept vegetative and palatable
- High density grazing – “knock down” and litter layer
- Burning and grazing
- No management

Problem and Study objective



Aims

- Simulate sward conditions achieved under common grazing management strategies
- Objective to identify simulated grazing strategy that limits *H. hirta* emergence

Exp 1. Unburned veld

**Disturb
Litter**

**No disturb
No litter**

**No disturb
Litter**

**Disturb
No litter**

**Control
(zero
treatment)**

**“Grazed” – clipped
and kept short (7cm)**



Exp 2. Burned veld

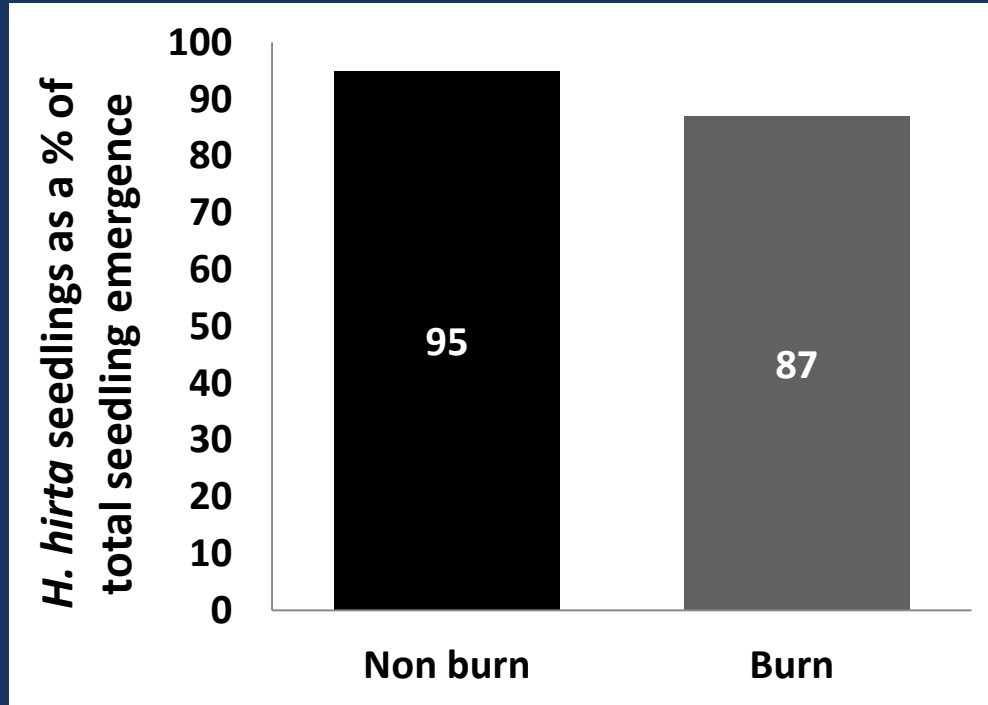
Disturb × Cut

No disturb × Cut

Disturb × No Cut

**No disturb × No cut
(control)**

Results and Discussion

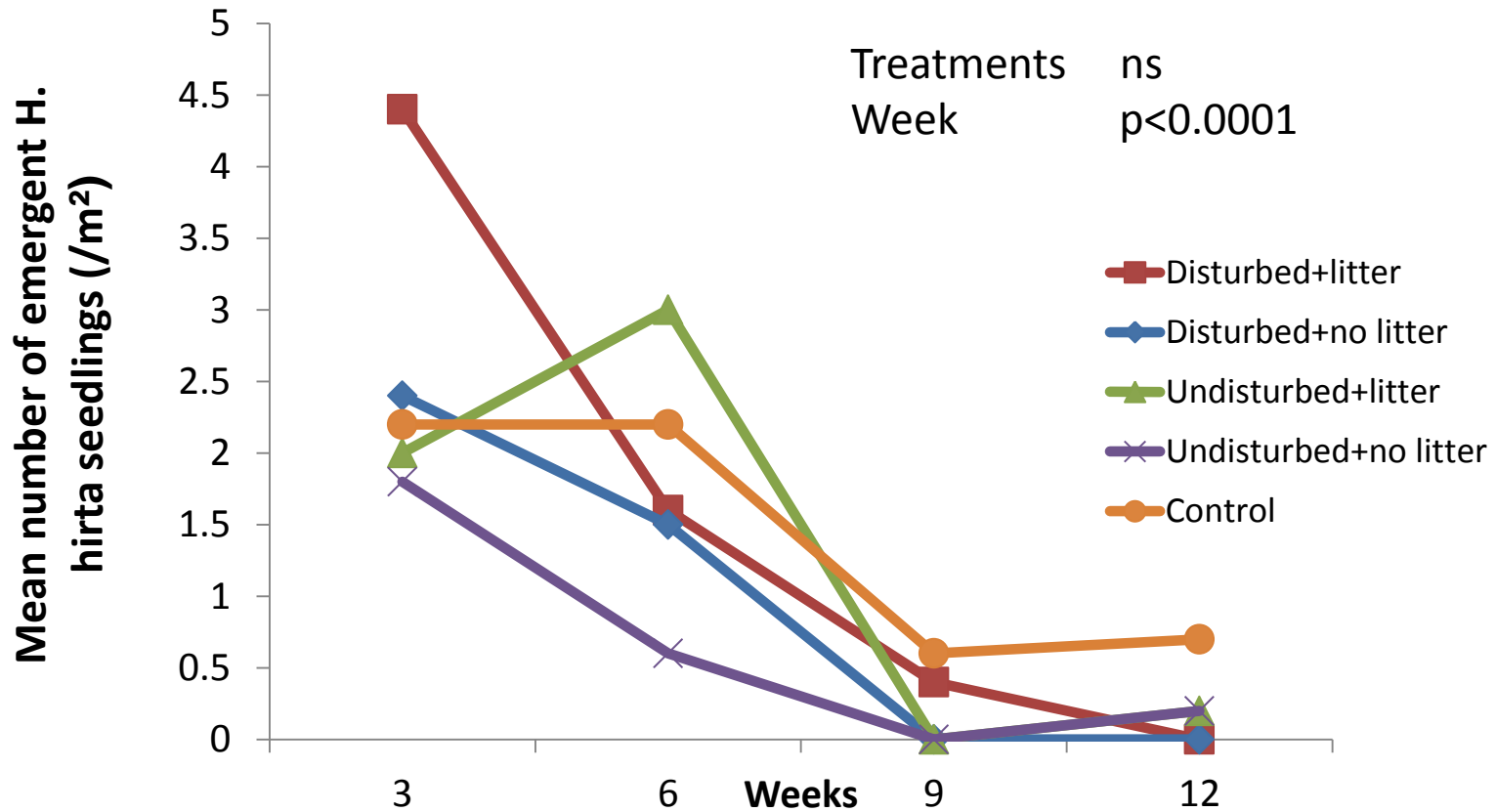


Total seedlings in non-burn (175) and burn (162)



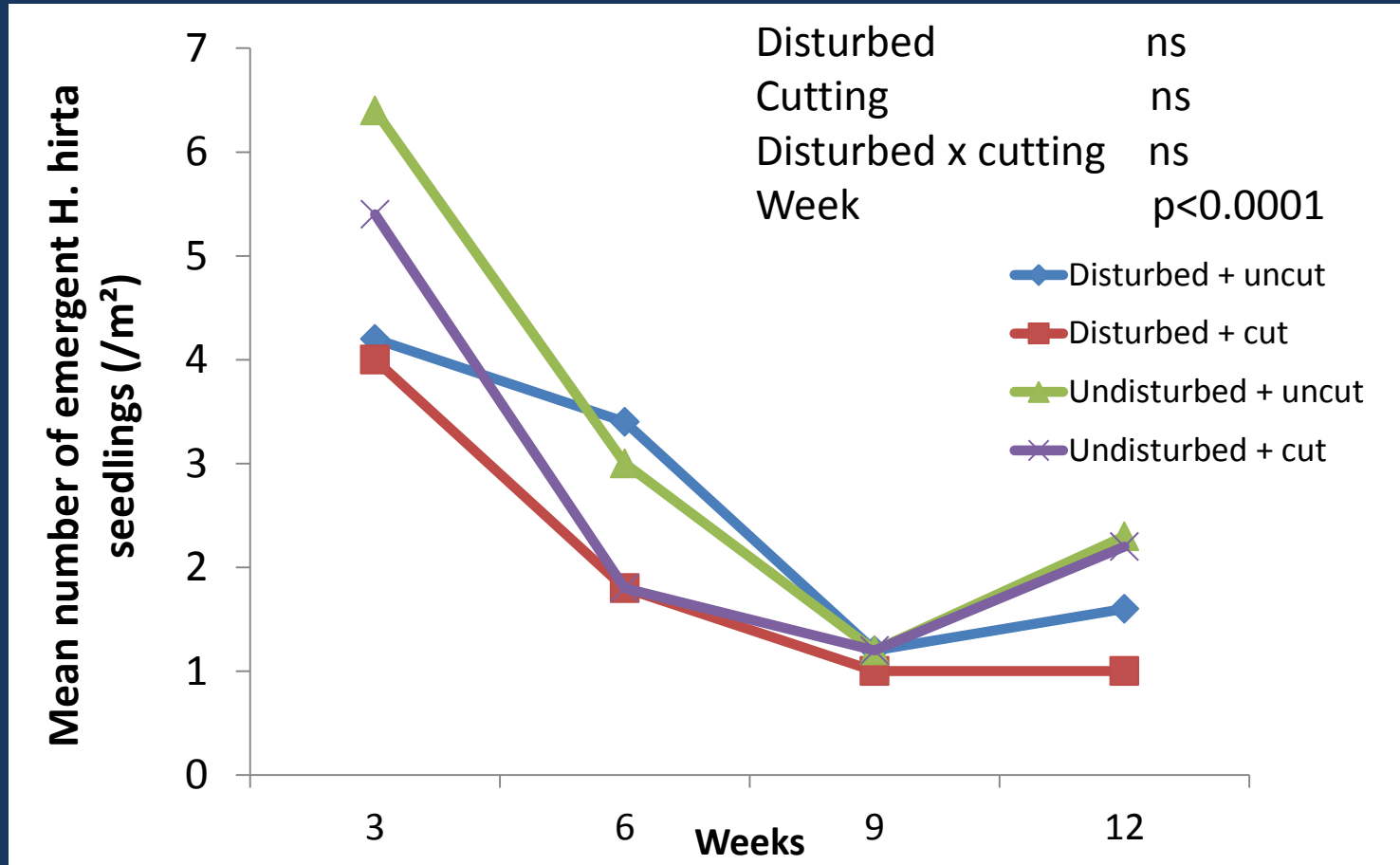
Results and Discussion – Exp. 1

Unburned



Results and Discussion – Exp. 2

Burned



Conclusion

Week had the greatest influence on emergence, largely due to rainfall events

Highlights and supports the persistence of this species

Treatment effects will certainly take a much longer time to influence seedling emergence

Eg.

Preventing seed set

Developing litter layer and nutrient cycling

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