Recruitment, survival and nurse plant effects in regeneration of *Aloe ferox* populations

by

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Introduction

- Importance of *A. ferox*
- Key challenges
- Research Questions
 - 1. Recruitment of *A. ferox*
 - 2. Survival of *A. ferox* juveniles
 - 3. A. ferox juveniles and nurse plants



Study sites

- Assegai Trails
- Bucklands
- Botanical gardens
- Thomas Baines
- Lawrence's Farm
- Ecca Pass
- Makana northern commonage



Methods

- Recruitment
- Survival
- Nurse plants
 - Charlie correction factor





Recruitment

Results

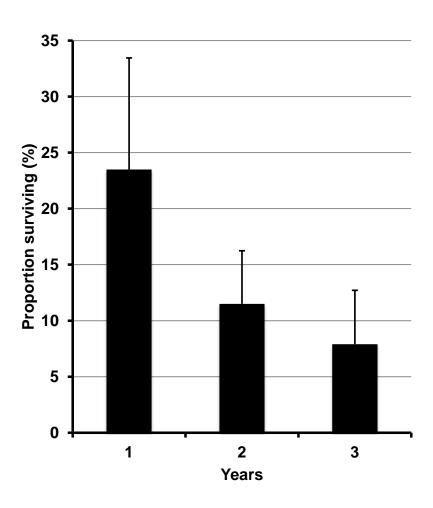


Fig. 1. Proportion of seedlings surviving. Bars are 1 SD.

Results

Survival

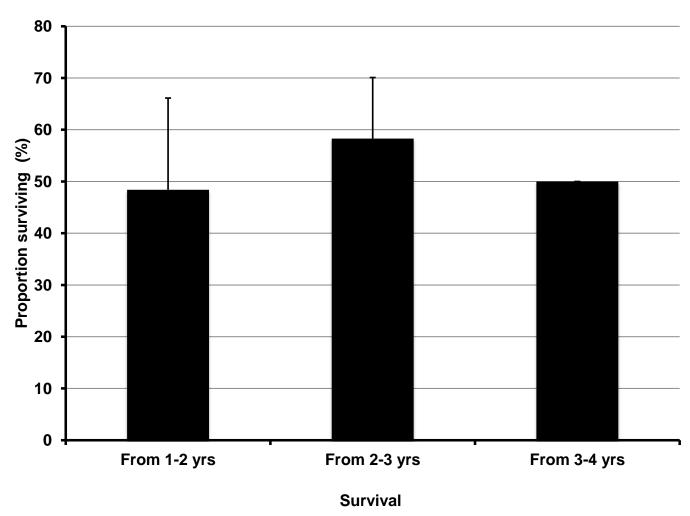


Fig. 2. Proportion of seedlings surviving to different age classes. Bars are 1 SD.

Results

Nurse plants

Table 1. Observed and expected numbers of recruits growing either under canopy or in open

	Ecca Pass		Commonage		Thomas Baines		Lawrence Farm	
	Canopy	Open	Canopy	Open	Canopy	Open	Canopy	Open
Observed	89	82	216	170	103	19	41	3
Expected	96		216		74		22	

$$(\chi^2 = 27.86, df = 3; p < 0.001)$$

Nursed Aloe seedling



Nursed Aloe seedlings



Conclusions

- Recruitment
- Survival
- Nurse plants
 - Charlie correction factor



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References

Shackleton, C.M. & Gambiza, J. 2007. Growth of *Aloe ferox* Mill. at selected sites in the Makana region of the Eastern Cape. *South African Journal of Botany*, 73: 266 – 269.