

.KISR Seed Germination Symposium

Desert Agriculture & Ecosystems Program
.Environmental & Life Science Research
Center
.Kuwait Institute for Scientific Research

Outline

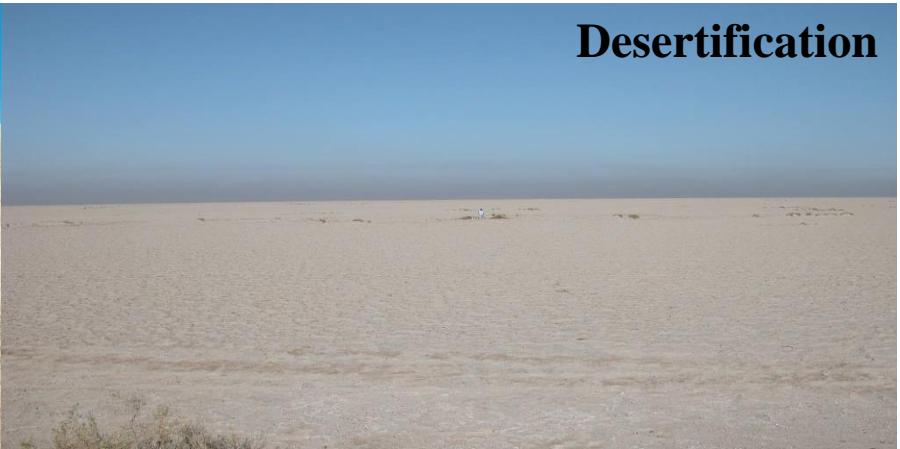
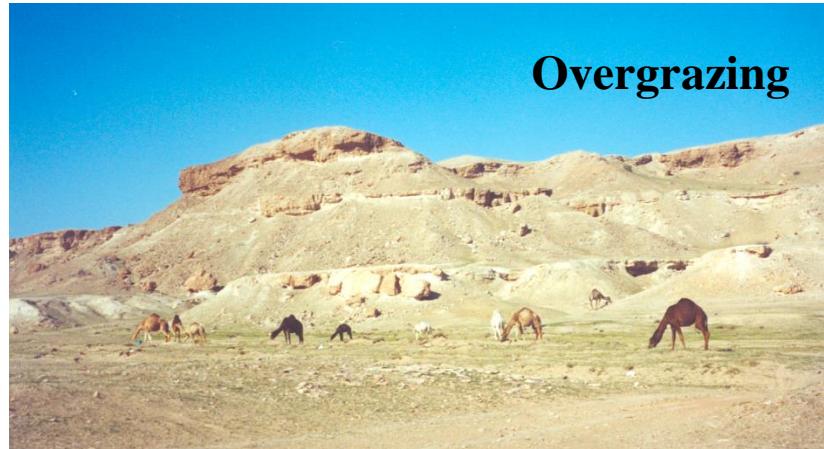
.Introduction

.Methods

.Discussion and results

.Current knowledge and future recommendations

Loss of Native Flora



Introduction

KISR Seed Bank Unit

Established in 2003

Short term storage (up to 5 years)

Long term storage (20+ years, temperatures below 2°C)

Methods

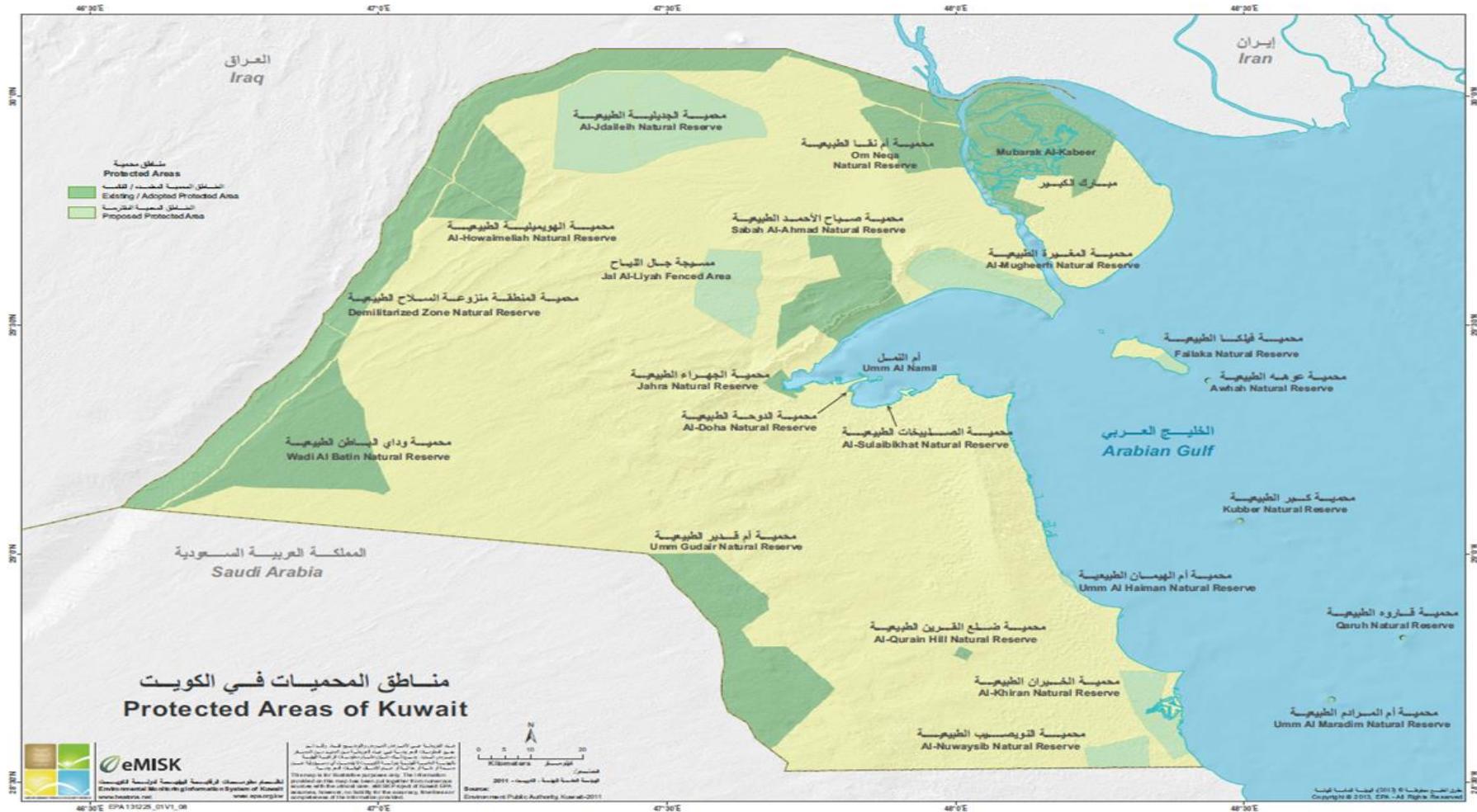
Seeds were stored for approximately 10 years under room temperature 20-25°C

90mm Whatman filter paper and petri dish (40 Replicates)



12 hour photo period under temperature conditions between 15/20 -C (Growth chamber)

Areas of Seed Collection



Plant species name	Total light	Total dark	Average (Dark)	% Average (Light)	% Total Germinated
<i>Zygophyllum qatarense</i>	58	10	10	58	68
<i>Gypsophila capillaris.</i>	57	13	13	57	70
<i>Vaccaria hispanica</i>	34	9	9	34	43
<i>Salvia spinosa</i>	32	12	12	32	44
<i>Echium rauwolfii</i>	28	7	7	28	35
<i>Gynandriris sisyrinchium</i>	27	43	43	27	70
<i>Plantago boissieri</i>	22	8	8	22	30
<i>Cyperus conglomeratus</i>	13	3	3	13	16
<i>Brassica tenuifolia</i>	7	3	3	7	10
<i>Helianthemum lippii</i>	11	6	6	11	17

Current knowledge :

1. Previous papers:

1. Germination Studies in *Rhanterium epapposum* Oliv

2. The effects of different treatments on seed germination of the *Cassia fistula* L. and *Cassia nodosa* Buch.-Ham. ex Roxb. in Kuwait.

Future recommendations:

Increase seed diversity only 88 different species out of 374

Testing effects of water quantities and quality on seed germination

Time and seed viability

Thank you!

