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OF THE EUROPEAN FEDERATION OF ANIMAL SCIENCE



Factors associated with Awassi lambs mortality in two production systems in Jordan

(Abstract)

Introduction



Middle East

Area: 92,000 km²

Introduction

Sheep in Jordan

Awassi 99.8% (others: Assaf, Chios, Najdi...)

H 2.5 million heads

H 1.5 million lambs /year



Introduction

Pre-weaning mortality = **15 – 20 %**

One-day-old lamb cost = **110 €**

Annual loss $(1,500,00 * 15% * 110)$ = **24,750,000 €**



Introduction

Causes of lambs mortality



```
graph TD; A[Causes of lambs mortality] --> B[Infectious]; A --> C[Non- Infectious]; B --- D[Pathogenic micro/macro-organisms]; C --- E["- Starvation<br>- Cold exposure<br>- Hypothermia<br>- Dystocia<br>- Nutrient deficiency<br>- Prey<br>- Congenital . . ."]
```

Infectious

Pathogenic
micro/macro-
organisms

Non- Infectious

- Starvation
- Cold exposure
- Hypothermia
- Dystocia
- Nutrient deficiency
- Prey
- Congenital . . .

Introduction

Causes of lambs mortality

Infectious

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Introduction

Lamb survivability:

“Trait” influenced by **“Genetic”** and **“Environment”**

Complex “Trait”

Maternal ability (mothering)

Lambs capability for survival

Management practices

Environmental conditions



Objectives

To investigate factors affecting pre-weaning mortality in Awassi lambs reared in extensive and semi-extensive production systems



Methodology

Scope of the study

Field study with sheep farmers

120 sheep flocks from different agro-ecological zones in Jordan

October 2010 – present



Methodology

Data

Field recording system using and Electronic Identification systems with a commercial sheep flock monitoring program



Methodology

Data

12,080 lambs

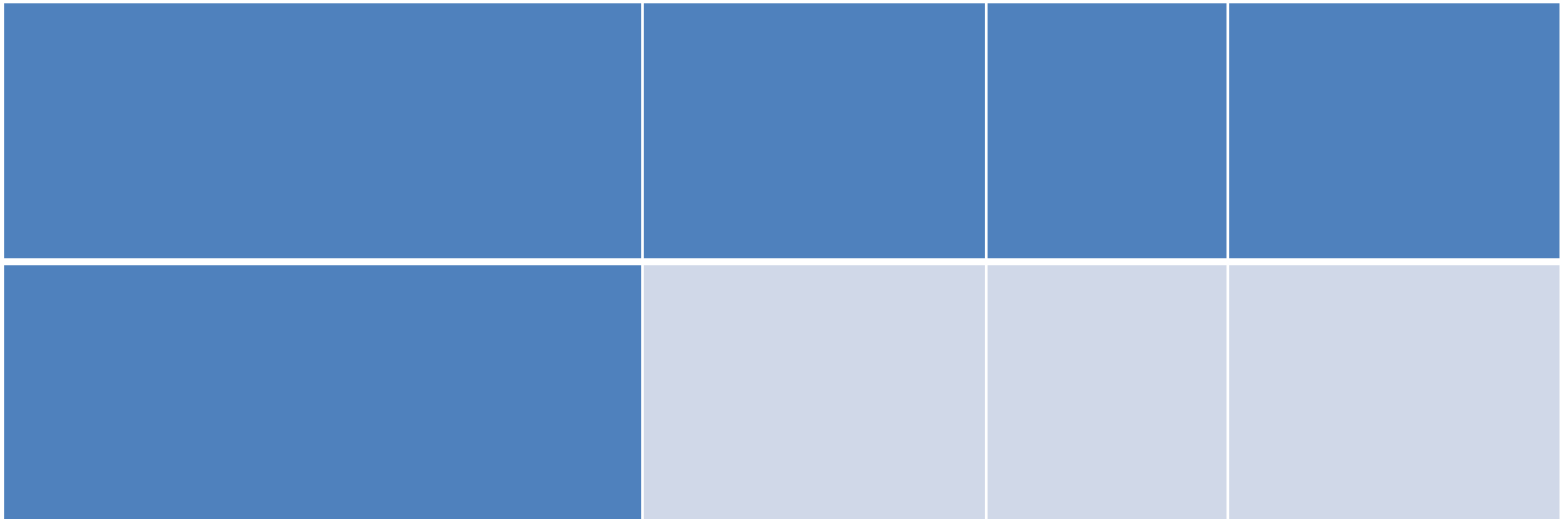
20,133 ewes

Records



Results

% of lamb mortalities



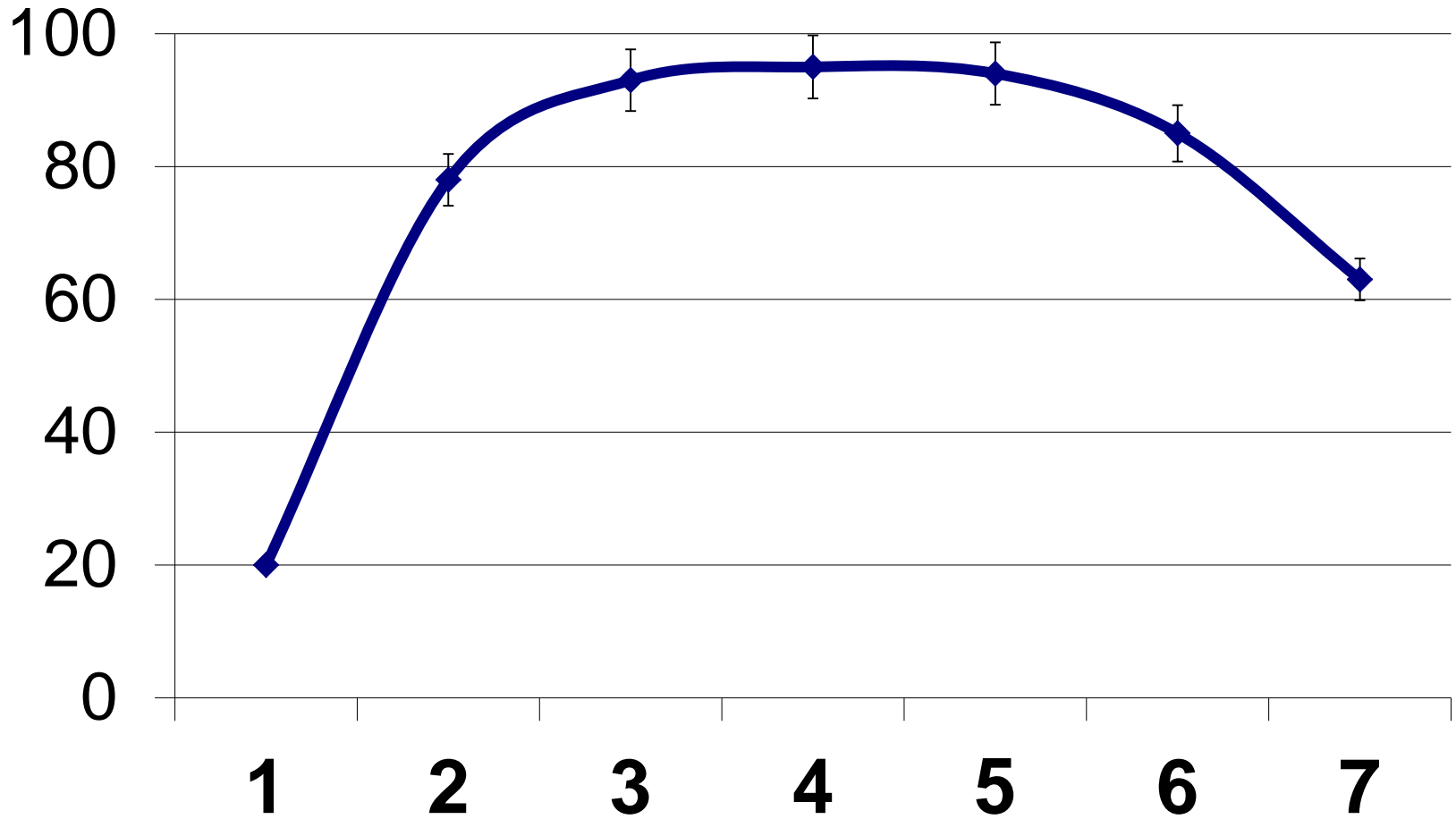
Results

Distribution of lamb mortalities %

Results

% of lamb mortalities

Results



Results



Results



Avoid!



