


Artificial Insemination

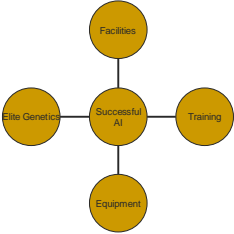


A Presentation By GROWTEC Pty Ltd

Performed By Lucas Brown

Objective of this presentation

- An overview of Artificial Insemination in the Australian Rabbit Industry



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    graph TD
      EG((Elite Genetics)) --- SA((Successful AI))
      F((Facilities)) --- SA
      T((Training)) --- SA
      E((Equipment)) --- SA
  
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- ## About Growtec
- Established in 1996
 - Using EBV's since 1998
 - Merged with QAFR in 2004
 - Commenced working with AI in 2003
 - Full use of AI 2005
 - Travel to Europe to study AI 2005
 - Growtec perform on Average 150 AI's per fortnight



A.I. History

- Semen was first viewed through a microscope in 1677
- The first commercial use of artificial insemination was in 1937 on Dairy Cattle
- Rabbit AI was pioneered in France over 20 years ago by IMV and Madame Souchet
- Today A.I. is used by rabbit producers around the world




Benefits

- n Efficient use of semen 25/1
- n Lowers disease transfer risk
- n Facilitates elite gene utilization
- n Allows batching
- n Reduces labour requirements
 - i time saving
- n Allows extended buck use
- n Allowing production from non receptive does

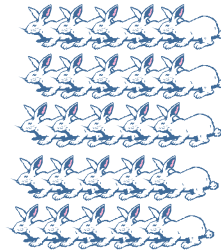
Natural



1 Mating

3 Ejaculates

AI



Disadvantages

- n Cost of equipment
- n Training requirements
- n Australia is behind European results.

Equipment

- n Specific Rabbit A.I equipment from IMV France through Genetics Australia
- n General Laboratory Equipment available in Australia.

Batching

- n Multiple Joining - Multiple Births
- n All In – All Out
- n Continuity of supply
- n Labour Co-ordination
- n Efficiency

Batching



Equipment

- n Collection
- n Examination
- n Insemination
- n Recording
- n Cleaning

Collection Equipment

- n Artificial Vagina
- n Semen Tube
- n Incubator



Examination Equipment

- n Microscope
- n Diluents



Insemination Equipment

- n Straw and Sheathes
- n Insemination syringe
- n Hormones



Collection



[Inspection]



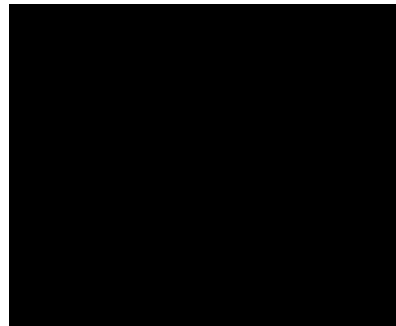
[Straw Preparation]



[Stimulation]

- n Rabbits are reflex ovulators
- n Bio-stimulation
- n Hormone injections

[Insemination]



[Data recording]

- n Semen Mass Motility
- n Semen Quality
- n Raw semen Quantity
- n Dilution Rate

[Cleaning]



Overview

- n AI Saves Time
- n AI Saves Money
- n Facilitates profit
- n Without AI, the industry can not produce growers efficiently
- n Is Achievable and Available NOW

Future AI training

- n CSIRO IMV GROWTEC 2006

