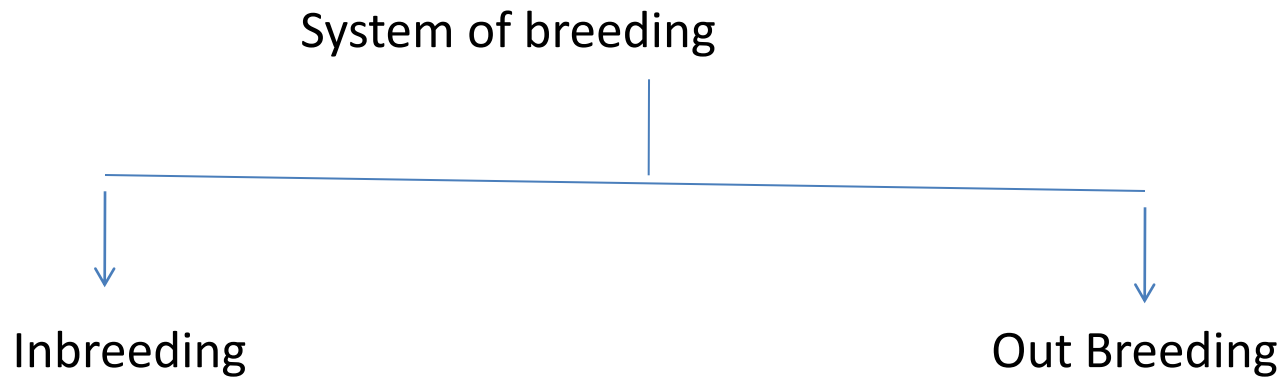


# Breeding Technique in Pig

Dr M S Jamra

- **Pig breeding** -A scientific practice which aims at genetic improvement of the pigs through successive generations by virtue of planned reproduction

# Systems of breeding



- Line breeding
- Close breeding

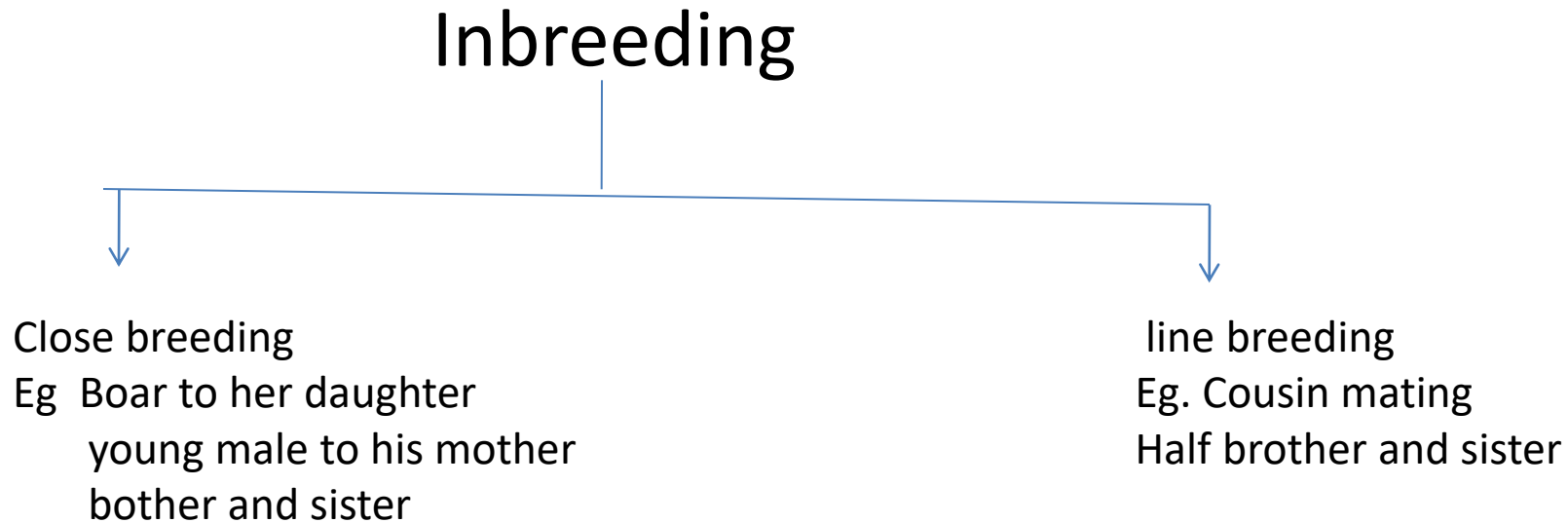
Out Crossing

Cross Breeding

Grading up

# 1. Inbreeding

- The mating of related individuals such as parent to off-spring or between brother and sister



# Inbreeding

## Advantages

- Increases homozygosity
- Keep pure animals
- Undesirable recessive gene may be eliminated

# Inbreeding

## Disadvantages

- Decreases litter size
- Decreases weaning weight
- Delay sexual maturity

- **Out crossing**
- The mating of unrelated individuals of the same breed

# Cross breeding

- The mating of unrelated individuals of the same breed



# Cross breeding

- Cross breeding is mating of individuals of different breeds

- **Criss crossing-** It is the alternate use of boars of two breeds on the female stock produced in a herd

- **Grading up** -mating of any pure-bred boar gilts or sows of a non-descript

# Method of mating

- Hand Mating- Is the practice of bringing the sows to the boar for individual service when they are standing heat. It is the most common method of mating is purebred animals

- *Advantages of hand mating*
- More efficient use of boar power.
- More accurate farrowing dates.
- Repeat breeders can be detected more easily.
- Breeding defects such as limber penis, weak hind legs are detected.
- Sterile boars are quickly detected.
- Provision can be made for breeding large boars to gilts or small boars to large sows.
- Reduced embryonic mortality, if sows are removed from the boar immediately after breeding.

# Pasture mating

- In this system of mating, the boar is permitted to run with sows. An aggressive yearlings or mature boar can actually
- serve 15 to 20 sows in a pasture mating system.

# Artificial Insemination

- This method has more advantages. Hand breeding with additional opportunity of exploiting the effective boar performance.
- Normal ejaculate of a boar is 200 ml to 500 ml of semen containing 20 to 50 billion spermatozoa. When suitable
- methods for storage and extenders are developed, 15 to 20 sows could be inseminated / or bred per ejaculate.