

Husbandry

Mr. Skirbst

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Selective cultivation of plants or animals for human use



4 Methods of Husbandry

1. Selective Breeding

2. Hybridization

3. Inbreeding

4. Cloning

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4 Methods of Husbandry

1. Selective Breeding

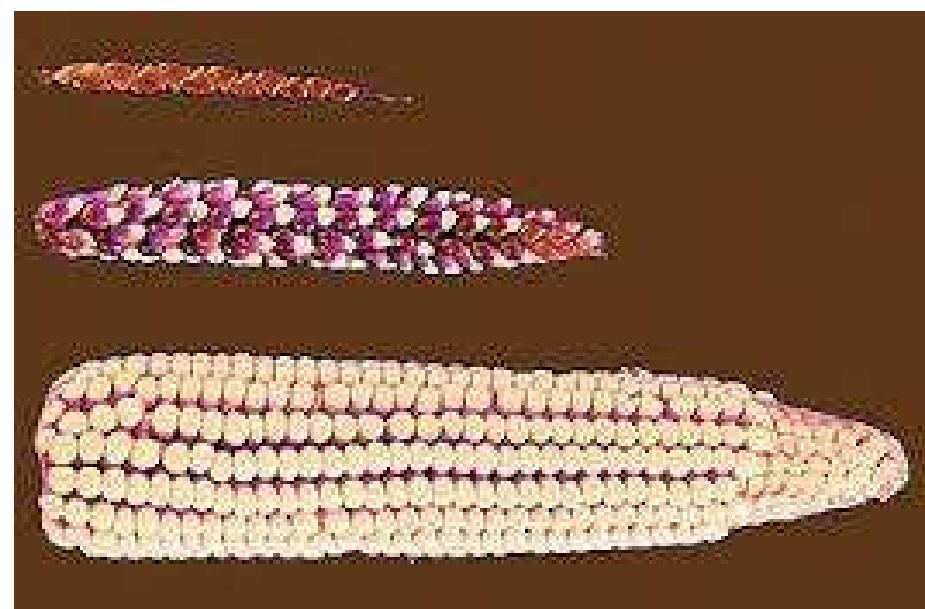
2. Hybridization

3. Inbreeding

4. Cloning

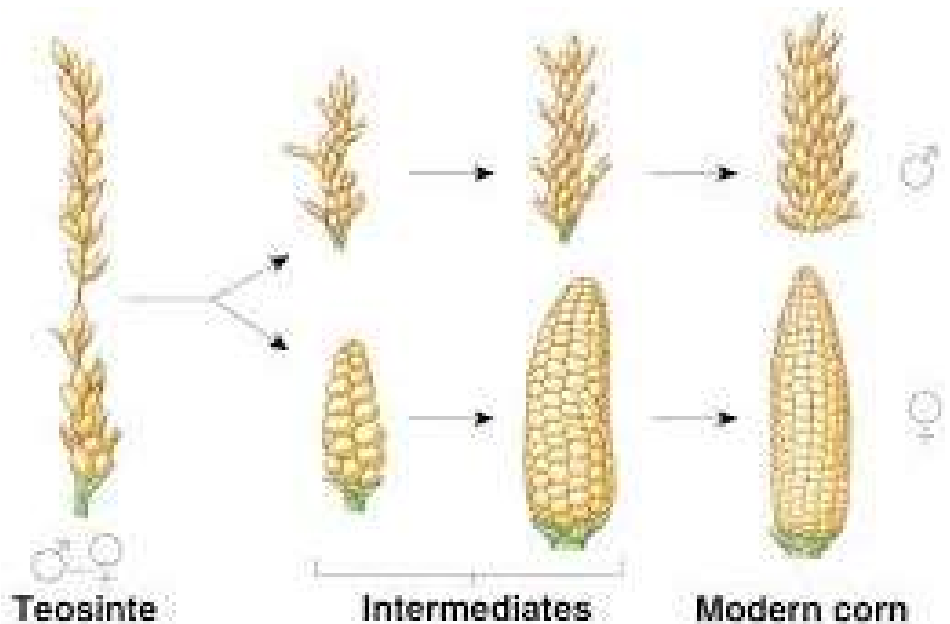
1. Selective Breeding

- **Crossing plants or animals with desirable characteristics**



1. Selective Breeding

- Crossing plants or animals with *desirable* characteristics
- **Produce offspring with those characteristics**



1. Selective Breeding

Examples:

- **Cows that produce more milk**



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Examples:

- Cows that produce more milk
- **Sheep that produce more wool**



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- Cows that produce more milk
- Sheep that produce more wool
- **Hens that lay more eggs**



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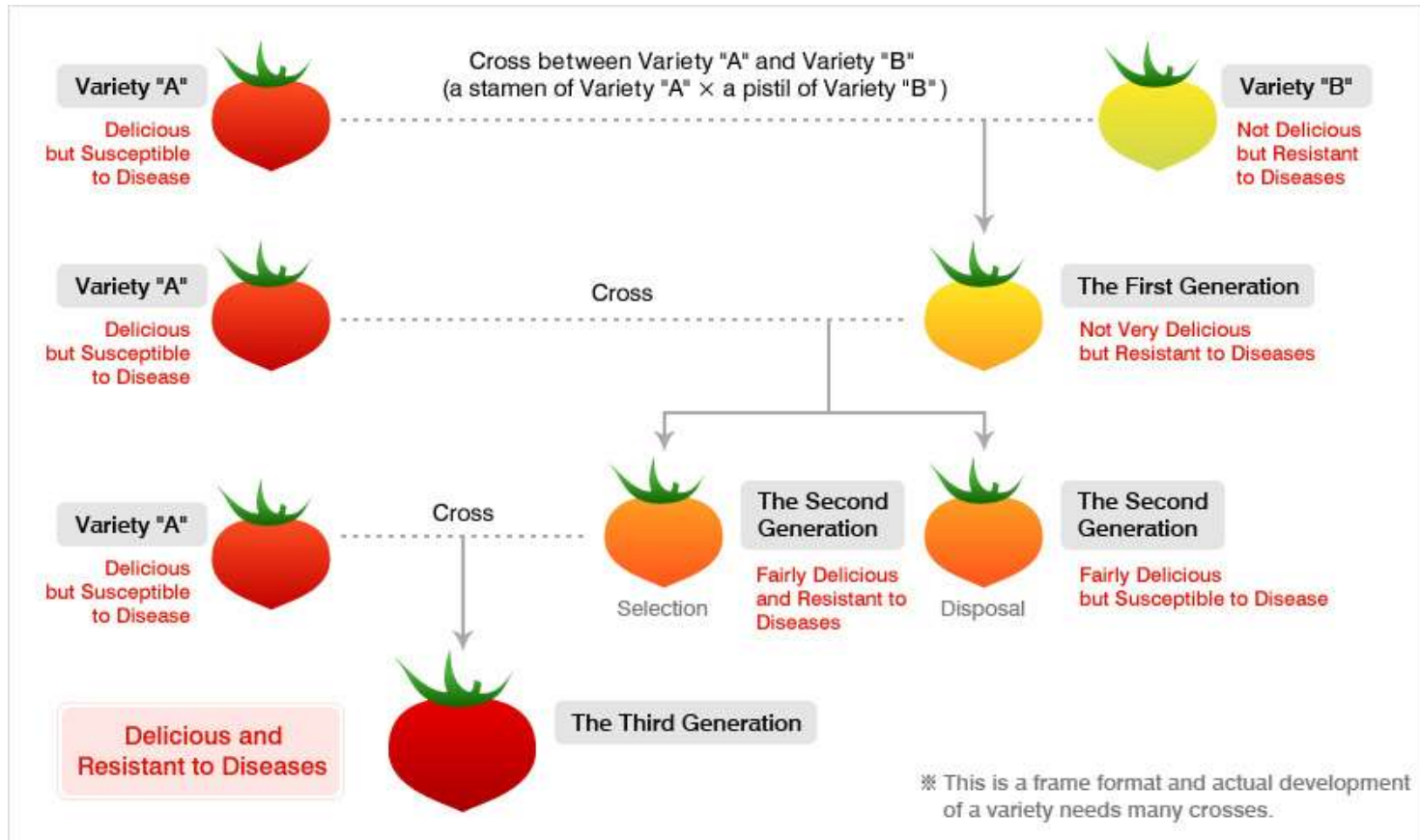
- Cows that produce more milk
- Sheep that produce more wool
- Hens that lay more eggs
- **Plants that produce more crops**



1. Selective Breeding

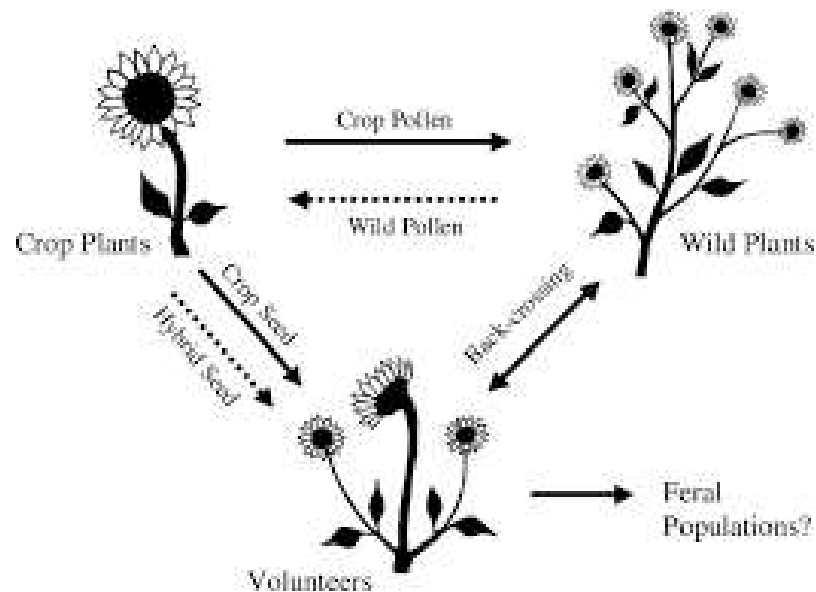
Examples:

- Plants that resist disease



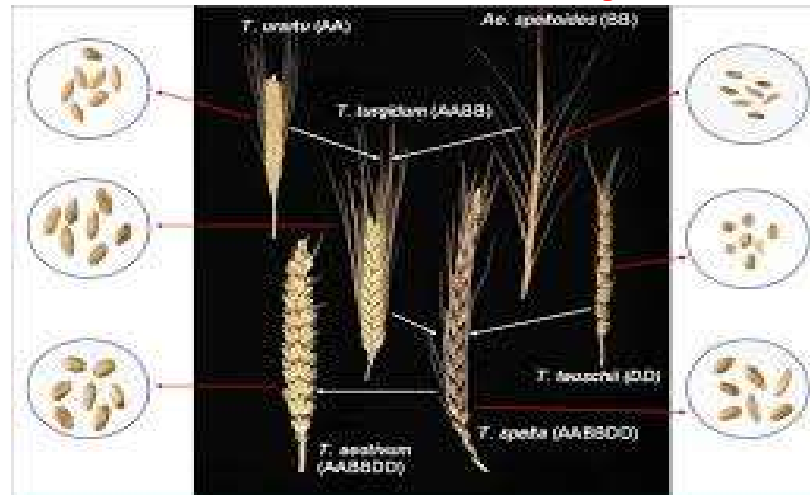
2. Hybridization

- Crossing genetically different but related species



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- **Natural hybridization (hybrids produced in nature, like wheat)**



2. Hybridization

- Crossing genetically different but related species
- *Natural* hybridization (hybrids produced in nature, like wheat)
- ***Artificial* hybridization (forced by humans, like donkey + horse = mule)**

Interspecific hybridization (between two different species of same genus)

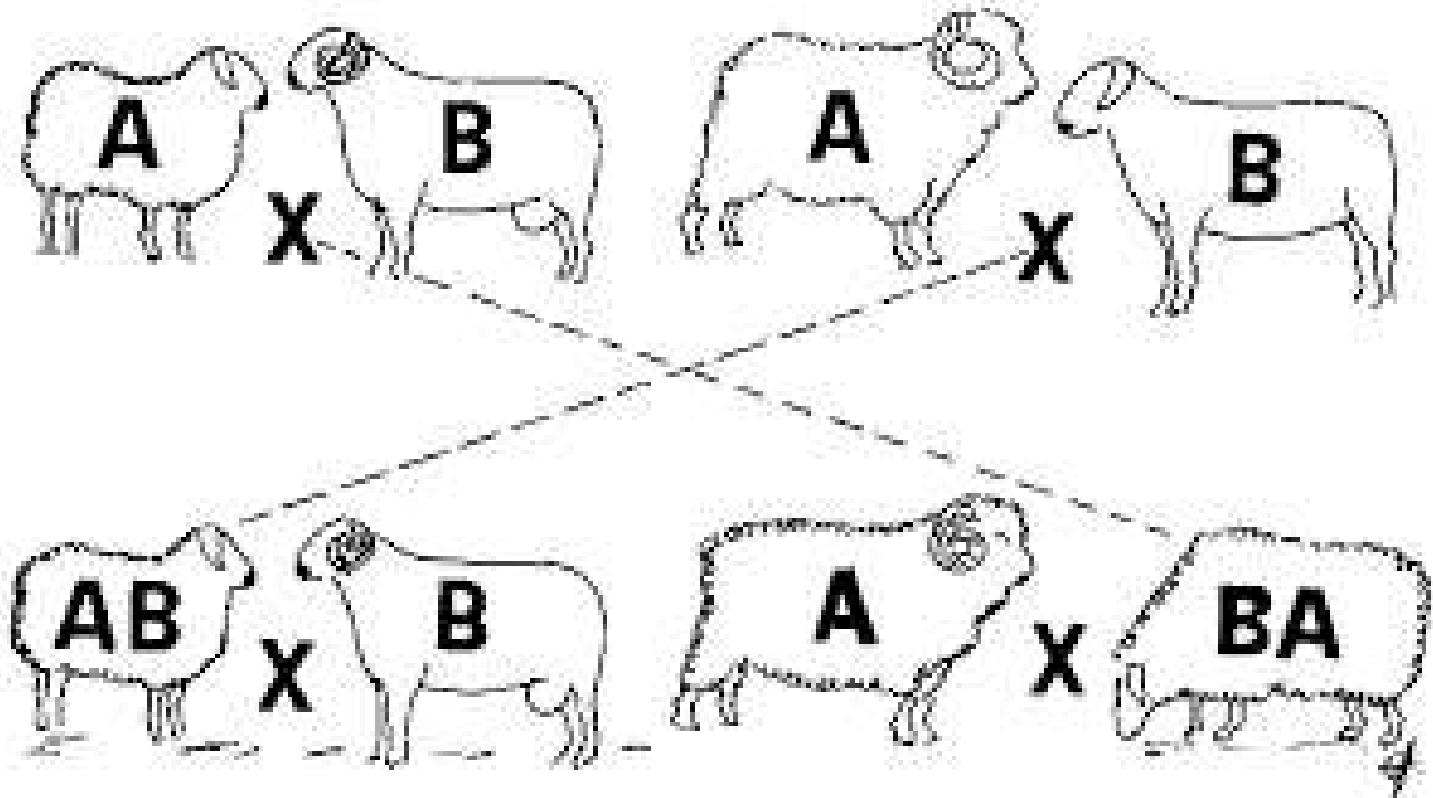


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2. Hybridization

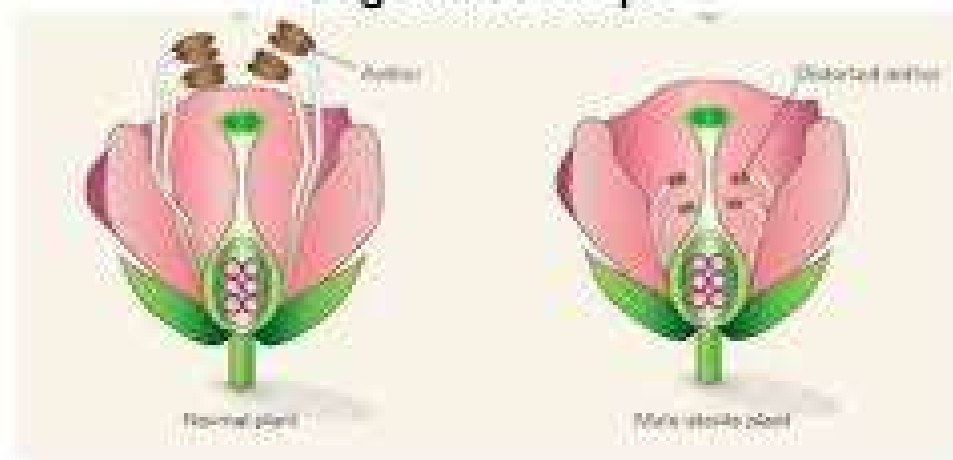
- Hybrid vigor (stronger / healthier offspring)



2. Hybridization

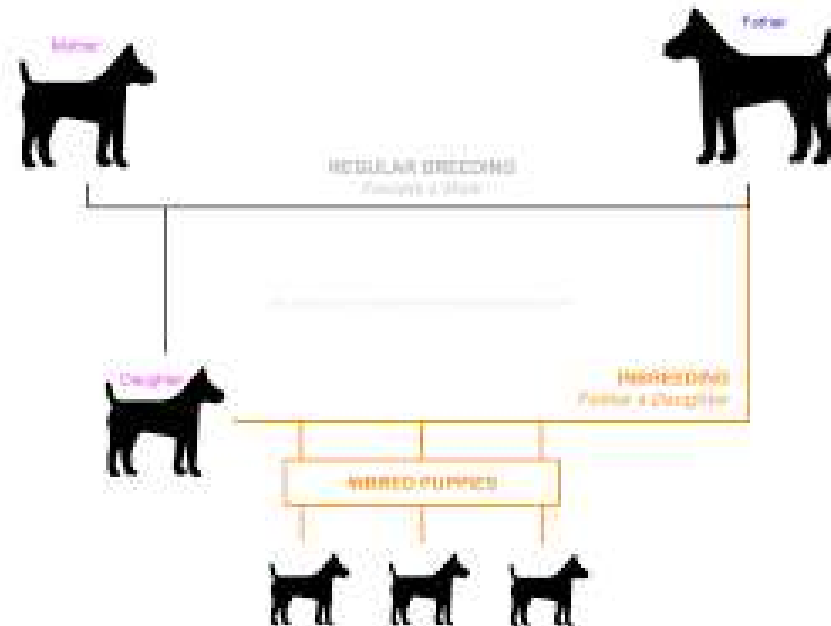
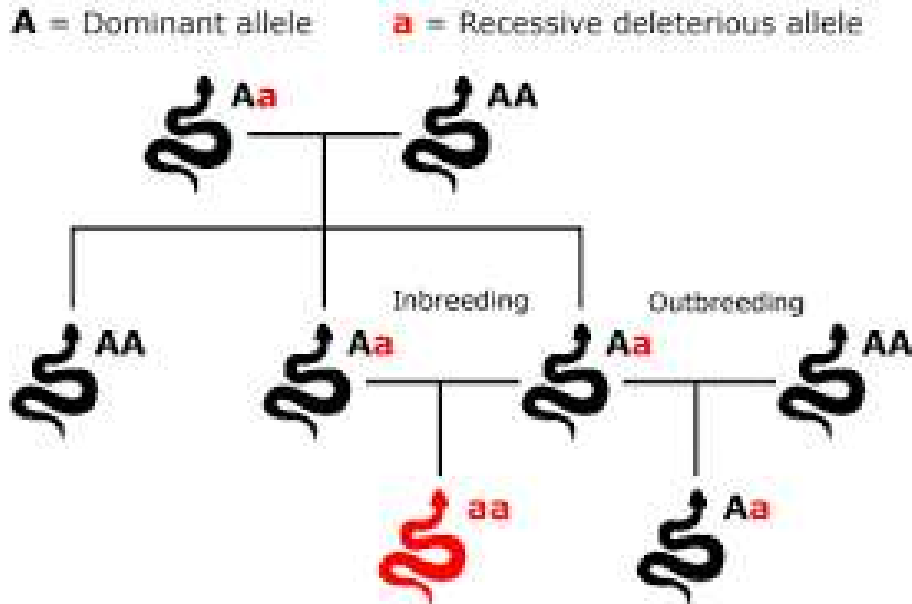
- Hybrid vigor (stronger / healthier offspring)
- **Sterile (unable to reproduce)**

Male sterility in Cross Pollinated and Vegetative crops



3. Inbreeding

- Crossing plants or animals that have same set of genes



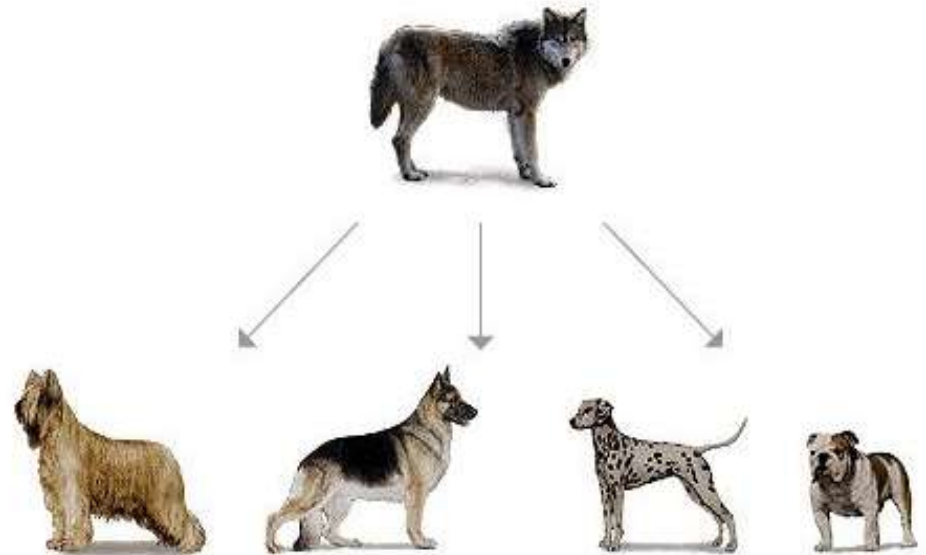
General Knowledge: Selective Breeding

■ Selective Breeding aka Artificial Selection

- Farmers and/or breeders mate plants or animals with desirable genetic traits to produce offspring with desired traits
- Inbreeding

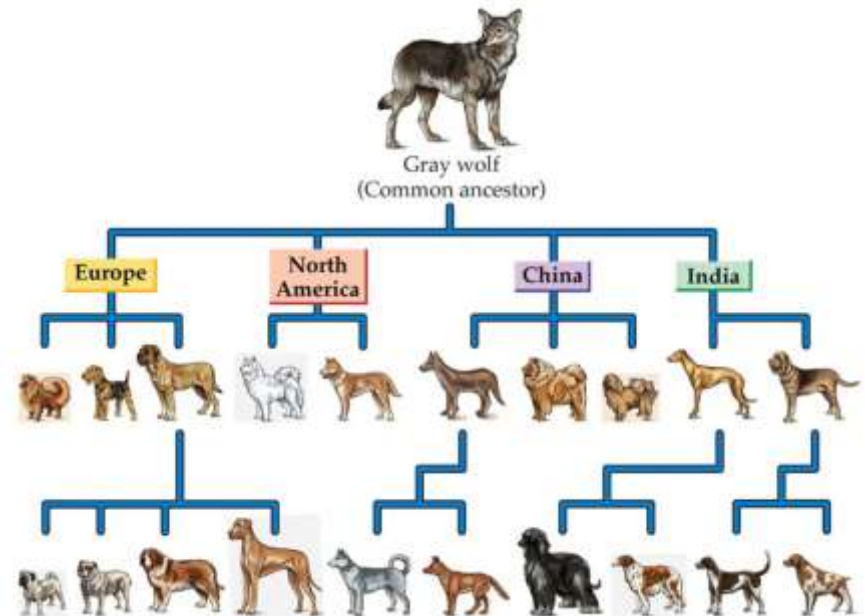
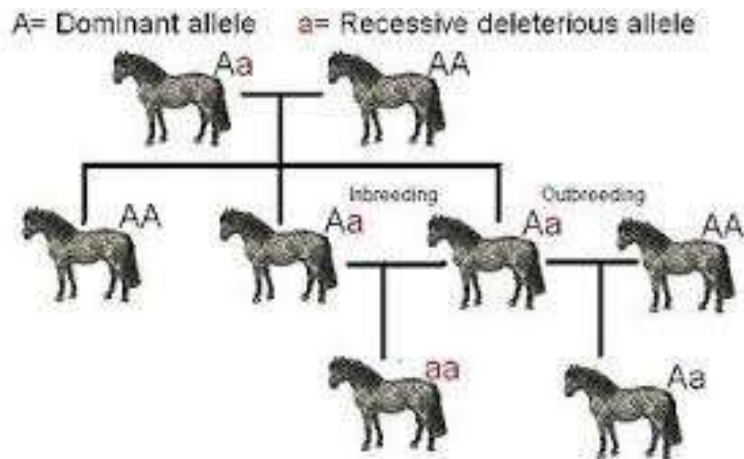
■ Examples:

- Dog Breeding
- Horse Breeding
- Any domesticated plant or animal



3. Inbreeding

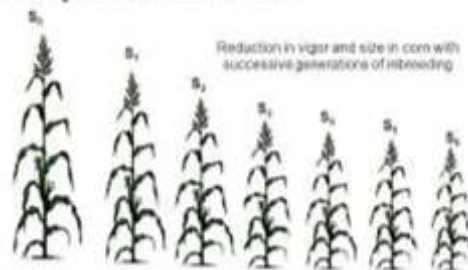
- Crossing plants or animals that have same set of genes
- **Production of breeds (ex. Dogs, horses, chickens)**



3. Inbreeding

- Crossing plants or animals that have same set of genes
- Production of breeds (ex. Dogs, horses, chickens)
- **Lack of genetic diversity can be a weakness**

Development of Inbred line



4. Cloning

- Producing offspring genetically identical to parents

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- **Ex. Seedless grapes, watermelon, spider plants**

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