

Topic list on Animal Breeding, 2019

Horse:

1. Evolution and domestication of the horse, micro-evolutionary consequences, related species, inter-species hybrids
2. Main reproduction features and traits of the horse (breeding season, raising foals)
3. Horse types, an judging of conformation in horse
4. Most important genetic diseases of the horse
5. Principal horse coat colours and inheritance
6. Marking and identification of the horses, the behavioural vices
7. Breeding goals and use in horse breeding, most important performance traits (race, sport, others)
8. The role of training and racing in horse breeding. The horse gaits
9. Utilization of horses: gallop, jumping, driving and others
10. Technology of sport horse breeding. Traits, and genetic improvement of sport horses
11. Technology of race horse breeding. Traits, and genetic improvement of race horses
12. Arabian origin horse breeds and other Arabian blooded descendants
13. The Spanish horses and Spanish blooded descendants
14. The English Thoroughbred, the trotters and Thoroughbred blooded sport horses
15. Cold blooded (heavy draught) horses, ponies and small horses

Cattle:

1. Domestication of cattle, micro-evolutionary consequences, related species, inter-species hybrids
2. Main reproduction features, reproduction traits and most important genetic diseases of cattle
3. Most important bovine genetic diseases
Breeding methods in cattle production: purebred breeding, crossbreeding
4. Breeding goals and characteristics (traits) of dairy cattle, milk properties
5. Dairy cattle technologies
6. Importance of udder evaluation in dairy cattle, udder health
7. Estimation of breeding value in dairy cattle production
8. Dairy cattle breeds (classification, characteristics, types), breeds for production of consumption milk
9. Dairy cattle breeds (classification, characteristics, types), breeds for cheese industry milk production
10. Milk production, milking and udder hygiene
11. Breeding goal and characteristics (traits) of beef and dual purpose cattle
12. Estimation of breeding value in beef cattle production
13. Elements of beef cattle breeding technologies
14. Beef cattle breeds: characteristics, classification, maternal beef cattle types and breeds
15. Beef cattle breeds: characteristics, classification, paternal beef cattle types and breeds

Sheep and goat:

1. Origin and domestication of small ruminants (sheep and goat), their species characteristics
2. Comparison of milk composition in dairy animals
3. Breeding (purebred and cross breeding) methods in sheep and goat production
4. Breeding goals and traits of sheep production, types, usage and products
5. Breeding goals and traits of goat production, types, usage and products
6. Milk type and prolific sheep breeds (prolificacy genes)
7. Meat (mutton) type sheep
8. Fur producer sheep breeds, hairy sheep
9. Milk type goat breeds, goat milk
10. Wool producing sheep breeds, structure and characteristics of wool, wool defects
11. Meat (chevon) and wool producer goat breeds
12. Reproduction features, reproduction, prolificacy and fertility traits, most important genetic diseases of sheep
13. Reproduction features, reproduction, prolificacy and fertility traits, most important genetic diseases of goat
14. Sheep and goat breeding technologies, production and management systems (extensive, intensive)

Swine:

1. Origin and domestication of swine, micro-evolutionary consequences: importance of pork production in human nutrition
2. Most important meat production traits of pig (fattening ability, meat/fat properties)
3. Carcass merit and SEUROOP qualification system
4. Reproduction features and traits of swine (prolificacy)
5. Most important porcine genetic diseases (PSS, MHS, PSE)
6. Breeding value estimation and selection of sows and boars
7. Pig breeding methods: pure breeding, continuous and discontinuous crossings and hybridization
8. Technology of swine production (modern, large unit, traditional, alternative)
9. Raising piglets and weaning
10. Classification of swine breeds (origin, constitution, size, colour, role in crossing)
11. Pig types and main aspects of conformation judging
12. Yorkshire and Large White pig breeds
13. The Landrace breed group of pigs
14. The colour pig breeds (Pietrain, Duroc, Hampshire)
15. Importance of Asian and other local swine breeds

Dog and cat:

1. Dog domestication, micro-evolutionary consequences, relatives and interspecies hybrids
2. Basics of canine breeding (goals, use, conformation and judging, breeding methods)
3. Canine reproduction features
4. Most important canine genetic diseases
5. Classification of dog breeds, FCI breed groups
6. Cat domestication, micro-evolutionary consequences, relatives and interspecies hybrids
7. Basics of feline breeding (goals, use, breeds, breeding methods)
8. Feline reproduction features

9. Most important feline genetic diseases

Poultry:

1. Origin and domestication of different poultry species, micro-evolutionary consequences, importance of meat and egg production of different poultry species in human nutrition
2. Most common genetic diseases of poultry species, defects as conformation traits
3. Main reproduction features of poultry species, puberty, breeding maturity, biology of egg production, broodiness and moulting/forced moulting
4. The layer hen type (breeding goal, use, breeds, traits, breeding methods)
5. Layer hen hybridization for consumers' egg, egg production
6. Broiler chicken (breeding goal, use, breeds, traits, breeding methods)
7. Broiler chicken production, fattening
8. Poultry production systems and technologies (large unit, traditional, alternative, get-away)
9. Breeding turkey (breeding goal, use, breeds, traits, breeding methods and hybrids)
10. Goose breeding (breeding goal, use, breeds, traits, breeding methods and hybrids)
11. Breeding ducks (breeding goal, use, species, breeds, traits, breeding methods and hybrids)
12. Breeding pigeon (goals, use, breeds, methods)