

## ANIMAL SCIENCE

Q 1: What are the breeds of cattle which are good for milk production and their milk production?

Ans:-Jersey and Holstein Friesian are the best exotic breeds of cattle which can thrive well in Sikkim condition. Jersey is small; brown in colour and produces 11 liters of milk per day. Holstein is black and white in colour, bigger than Jersey and will produce 20 liters of milk per day.

Q 2: How much feed and fodder should be given to a milk producing cow?

Ans:-Milking cow should be fed with minimum 2.75 kg of concentrate feed per day or more as per the milk yield of a cow and minimum 20kg of green fodder in a day.

Q 3: What causes milk fever in cow?

Ans:- Milk fever is caused by bacteria. Symptoms of milk fever is fever, clotting of milk on milking, udder becomes hot and sometimes hard. As different types of bacteria causes mastitis it is best to get the milk tested so that exact causative bacteria can be known and specific treatment can be given. This test can be done at ICAR Centre at Tadong. Treatment can be done by infusion of medicines i.e., antibiotic specific to the bacteria and giving hot fomentation in the udder.

Q 4: My cows are not feeding, saliva is coming out of the mouth, and there is wound in the hooves?

Ans:-The case may be due to Foot and Mouth disease which is caused by virus. Sometimes when there is severe the cow may also die. There can be great loss of milk production as the cows are not feeding. The effected cow can be treated by giving antibiotics and cleaning between the hooves and gums with potassium permanganate and applying glycerin in the effected gums. This disease can be prevented by regular vaccination which is provided by state veterinary dept. free of cost.

Q 5: What is the best time of AI in cow?

Ans:-The best time of AI in cow is within 8 to 10 hours of heat. When the cow come into heat in the morning AI should be done in the evening and if it comes in the evening it should be done in the next day morning.

Q 6: I have started broiler poultry of two week of age they have whitish diarrhoea, what should I do?

Ans:-Whitish diarrhoea is caused by bacteria and mostly affects the young ones. This requires early treatment otherwise all the birds will die. Tetracycline or Enrofloxacin can be given in drinking water for treatment of this disease.

Q 7: There is formation of small nodules in the face of my birds, eyes are swollen and closed. What is the reason and what medicine should I give?

Ans:-This condition is known as avian pox. It is caused by virus which can be prevented by vaccination at 6 to 8 weeks of age. The effected birds should be kept separately and mortality can be prevented by giving antibiotics like Terramycin or Aureomycin by mixing in feed by controlling secondary bacterial infection.

Q 7: What is the space requirement of broiler birds for profitable income?

Ans:-Initially about 50-60 cm<sup>2</sup> spaces per chick under brooder is recommended and increased gradually upto 1-2 sq.ft. per bird at 6 to 8 weeks of age.

Q 8: I have a broiler unit of 100 birds, maximum of them suffered from paralysis and they cannot move?

Ans:-This happens usually when the birds are kept in very congested conditions with less space and when there is a deficiency in vitamin B complex especially B2. This can be prevented by keeping the birds with adequate space and supplementing with vitamins and minerals.

Q 9: What vitamins and minerals should I give to my poultry?

Ans:-If it is a broiler for commercial purposes, vitamin B complex and minerals like calcium with vitamin D3 and phosphorus should be given as they require these minerals and vitamins for fast growth.

Q 10: Faeces of my poultry birds is reddish in colour, what is the reason?

Ans:-Reddish colour of faeces in birds especially in young is due to protozoal infection, known as Coccidiosis. This occurs mainly due to unhygienic conditions of the poultry house and wet floor. To prevent this, the poultry house should be kept dry and clean. The affected birds can be treated by adding Amprolium powder in drinking water.

Q 11: What type of poultry will be good for backyard?

Ans:-For profitable backyard poultry; birds which can thrive well with minimum care and feeding and those which are resistant to diseases like Ranikhet but produce more eggs and meat than that by local birds. The best is Vanaraja and Giriraja which lays about 150 eggs per year and adult attains a body weight of 2.5 to 3.5 kg which is comparatively higher than local birds.

Q 12: What is the vaccination schedule of broiler poultry birds?

Ans: - For broilers mainly three types of vaccines can be given up to market age:-

- Marek's disease vaccine is given on the day of hatching at the rate of 0.2 ml per chicks by subcutaneous or intramuscular injection.
- Ranikhet disease vaccine 2-7 days and at 35 days by dropping in the eye and nostril and
- Infectious Bursal Disease (IBD) vaccine at the age of 12 – 14 days in drinking

The most important is Ranikhet Disease as this disease is mostly prevalent in this area.

Q 13: My cow does not come to heat; it has given birth five months back. What is the reason?

Ans:-A cow should come into heat within 60 to 90 days of calving, if it does not come into heat within this period it is known as anestrus. The cow may be malnourished and deficient in vitamins and minerals. Feed balanced concentrate feed with leguminous green fodder and supplement with mineral and vitamins.

Q 14: My cow is not giving milk, the udder is swollen and hard, and milk is clotted.

Ans:-This is due to mastitis. Immediate treatment should be done by infusion of antibiotic in the udder and by giving hot fomentation. To prevent transmission to the other cows keep the shed clean and dry and milking of that cow should be done in the last after milking all the healthy cows.

Q 14: My cow has given birth one week back, whitish thick liquid like substance is coming out of the vagina. What is the reason?

Ans:-This is due to infection of uterus; the substance which comes out is pus. This disease is known as Metritis. It can be treated by infusion of antibiotics in the uterus.

Q 15: What type of goat is good for meat purpose?

Ans:-For meat purpose Black Bengal and Barbari are considered to be best for Sikkim condition. Black Bengal goats are black in colour and black colour is mostly preferred by people. The good quality of this breed is its habit of stall feeding. Male weighs 36 to 45 kg and female 27 to 36 kg. Black Bengal goats are small and the meat is regarded as excellent. Adult male weighs 14 to 16 kg and female 9 to 14 kg.

Q 16: Up to what age broiler birds should be reared to get maximum profit?

Ans: - To be profitable broiler should be reared for 45 days (6weeks) at this time a bird should attain minimum 1.5 to 1.8 kg body weight. For this feeding is very much important, feed should be of good quality procured from good and reputed company.

Q 17: There is scarcity of fodder during winter. How can we store for winter?

Ans:-Scarcity of fodder occurs mainly during October to April. Fodder which is abundantly available during rainy season can be stored as hay and silage. Silage can be prepared by different method if requirement is less it can be made in polythene bags or if requirement is huge or in large quantity can be prepared in pits or bunkers. The best method is by use of polythene bags as it is cheap and can be kept in any vacant room for storage.

Q 18: What are the fodders that can be cultivated for winter season?

Ans:-Oat and Lucerne can be cultivated to meet the requirements of green fodder during winter season oat can be sown in the month of October to November two to three cuts can be harvested from December i.e. lean season. Lucerne can be cultivated by broadcasting in first week of October.

Q 19: What are the different breeds of pigs which are good for Sikkim?

Ans:-Hampshire, large black and Yorkshire breeds of pigs are good for Sikkim condition. Hampshire pigs are black in colour with white stripe on its back adult male will be 250 to 300 kg. Large White Yorkshire pigs are white in colour; body is long with less fat and weighs 300 to 400 kg and female 230 to 320 kg. Large black are black in colour and heavy which is commonly reared in Sikkim.

Q 20: What vaccine should be given to pigs?

Ans:-Among the diseases of pigs Swine Fever is one of the most common; this disease causes maximum deaths in pigs. Caused by virus there is no treatment and the effected pigs die and can be transmitted easily. It can be prevented by vaccination of pigs at the time of weaning and yearly vaccination. Vaccine is available at minimal or free of cost at Veterinary Hospital and dispensaries.

Q 21: My piglets are suffering from diarrhea which is whitish in colour and they are weak.

Ans:-The piglets are suffering from Piglet Anemia, give iron containing vitamins like Sarcoferol or Feroliv. This condition can be prevented by injecting Imferon at the rate of 0.5 ml intramuscularly when they are one week of age.