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(1)

EFFICIENCY OF 1,2 PROPANE DIOL IN CRYOPRESERVATION OF BUFFALO FOLLICULAR OOCYTES

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Oocytes of two distinct qualities those with and without cumulus mass complex were cryopreservcd with 2.0M 1,2 Propane diol. After cryopreservation 86.3% A type (oocytes cumulus complex) and 76.0% B type (denuded oocytes) recovered normal. There was significant difference between two groups. The cryopreserved oocytes examined morphologically showed several deformities. Post-thawing oocytes were subjected to maturation process showed maturation rate 15.37% for A type and 13.3% for B type.

(2)

STUDIES ON SELECTED SOCIO-ECONOMIC FACTORS IN RELATION TO DIFFERENT POULTRY FARMING PRACTICES

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In India rural poultry production is recognized as an important instrument of socio-economic improvement among the rural communities. The study was conducted in North 24 Parganas district of West Bengal, where two blocks were purposively selected from the district having high poultry population from the two zones (i.e. non-saline and saline zones). From each zone two clusters with three vilages in each, based on proximity were selected randomly on proportionate basis to form a total sample size of 150 respondents. A structured interview schedule was prepared, pre-tested and administered personally for data collection. Data thus gernerated were computed and analyzed through different statistical tools viz. correlation analysis, mean and ‘t’ test. The mean age, education, livestock and land holding, meat price, man days of employment, egg and meat consumption differed significantly (P<0.01) in the two systems that is intensive and semi-intensive including backyard system. Age, education, meat production and meat price differed significantly (P<0.01) in the two blocks under study i.e, the saline and non-saline zone.

(3)

EFFECT OF TEMPERATURE AND VARIOUS EGG SHELL TREATMENTS ON QUALITY OF EGG DURING STORAGE

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The effect of temperature and various egg shell treatments like oil dipping, lime water treatment, water glass treatment on the physical quality during different storage periods were evaluated. The interior qualities of the egg were assessed by weight changes, yolk index, albumen index. Haugh unit and air cell size. The results suggest that these changes were faster in higher temperatures (30°C and 40°C) than ambient termperature (20°C-23°C) and deterioration of egg quality could be observed in higher termperature. Weight loss, air cell size, Haugh unit, albumen index and yolk index were better maintained in oil coated eggs than lime and water glass treated eggs irrespective of storage period. The shelf life of oil coaled eggs could be extended 3-4 fold compared to that of eggs kept at ambient temperature whereas egg stored at 30°C and 40°C could not be kept more than 1-2 days.

(4)

ULTRASONOGRAPHIC STUDIES OF PROSTATE DISEASE IN CANINE

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Ultrasonography of the prostate gland was done with 3.5MHz/4.0 MHz transducer in sixteen dogs of different large breeds which had some urinary complications. Serum urea nitrogen and serum creatinine were found higher than normal on blood examination in case of prostatomegaly. Prostatomegaly was diagnosed in eight dogs. After castration, scanning was done and reduction of prostate volume was observed.

(5)

QUALITY OF GHEE SOLD IN AND AROUND KOLKATA MARKET

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Thirty samples of ghee manufactured by organized and unorganized dairies were collected from the markets of Kolkata and its suburbs and were evaluated for chemical and organoleptic properties. Level of moisture, free fatty acid and peroxide value in ghee from unorganized dairies were higher than those from organized dairies. Ghee from organized dairies were organoleptically superior to that from unorganized dairies. Some samples of ghee both from organized and unorganized dairies did not conform to PFA Act (1976) in respect of moisture, Reichert Meissl value and Butyro-refractometer reading. Vanaspati was detected in three ghee samples from unorganized dairies.

(6)

STUDIES ON SOME LIFE TIME TRAITS IN CROSSBRED DAIRY COWS

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Life time traits of Dairy cows like average herd life, AFC, productive life, no. of lactation completed in the life time. life time milk production up to 3rd and 5th lactation were observed as 2987. 16 days. 1178.16 days, 1822.50 days, 4.22 no., 6078.21 kg and 10.828.24 kg respectively. It was revealed that halfbreds are superior that 3/4th crosses in terms of herd life. AFC, productive life and no. of lactation complete in life time. However, on the basis of life time. However, on the basis of life time milk production, 3/4th crosses showed superiority over halfbreds. It was further observed that Jersey halfbreds showed lowest AFC and also remained dry for minimum no. of days out of productive life than other crossbred groups.

(7)

PULMONARY ANTHRACOSIS IN GAROLE SHEEP

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In the present study, the lungs, mediastinal and bronchial lymph nodes of 750 Garole sheep slaughtered in local markets of Sundarban deltas were screened for anthracosis for the period of one year. Anthracosis was found in the lungs and associated lymph nodes of 19 (2.53%) garole sheep. The lung and lymph node were pigmented black colour. Histologically, lung tissue revealed the deposition of minute black particles in the alveolar walls and carbon particle laden macrophages were observed both in lung an lymph nodes. Inhalation of smoke for a sustainable period during night confinement at ill ventilated pen. adjacent to farmers’ house and diesel derive boat transportation might be ascribed as the cause of such form of pneumoconiosis.

(8)

PHYSIOLOGICAL RESPONSES OF YAK (POEPHAGUS GRUNNIENS L) WHILE CARRYING LOAD AT HIGH ALTITUDE MOUNTAINOUS TERRAIN OF ARUNACHAL PRADESH

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A total of ten adult male yaks were subjected to walk with a load weighing 15% of their body weight . Pulse rate significantly raised for some animals and respiratory rate was significantly (p<0.01) higher after load carrying. Temperature was also increased significantly (p<0.05).

(9)

EFFECT OF DOUBLE DOSES OF GAMMA IRRADIATION OF *PARAMPHISTOMUM* CERVI METACERCARIAE ON THE ESTABLISHMENT OF INFECTION IN SHEEP

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A study was conducted to determine the effect of double doses of gamma irradiation of *Paramphistome* cervi metacercariae by infecting eight parasite-free adult sheep one and half to two years of either sex. The eight sheep were divided into three groups of 2 animals each in group A and B and four animals in control group C. The mean worm burden on slaughter, 2 months post-challenge infection with normalmetcacerariae in 2 Krad immunized group A was 273.5 and from 3 Krad immunized group B was 603.5. Whereas the worm load of C4 was 1085, which is much higher as compared to all other groups of immunized animals. The immunization gave 78.1 per cent protection in group A and 44.28 per cent in group B on the basis of the worm recovery Observations on the growth, development migration and recovery of juveniles or adults indicated that 2 Krads double dose of gamma irradiation was optimum against *P.cervi*.

(10)

STUDIES ON MORBIDITY AND MORTALITY PATTERN IN CATTLE AT THE ORGANIZED FARMS OF DIFFERENT AGRO-GEO-CLIMATIC CONDITIONS IN UTTAR PRADESH

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For planning, organization and operation of disease control programmes, reliable estimates on the quantity and population distribution of diseases and deaths are required. Morbidity and mortality and mortality studies are important cpidemiological tools, which give quantitative description and occurrence of diseases and deaths in the population. Although morbidity and mortality due to various disease conditions cause serious economic losses to the diary industry, little systematic work has been done to study them in India.

(11)

GROSS ANATOMY AND CYTOMORPHOLOGY OF THE MODERATOR BANDS (TRABECULAE SEPTOMERGINALIS) OF PIG WITH SPECIAL REFERENCE TO THE CONDUCTING SYSTEM

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Gross anatomical, histomorphological and histochemical aspects of the moderator bands (Trabecular septomerginalis) were studied on pig. Twenty hearts were collected and ten were kept for gross anatomical study and rests were preserved in 10% neutral buffer formalin (NBF) for microscopical observation. The present finding revealed that the moderator band was present in the right ventrical, but none was detected in the left ventrical. The thickness fo the band varied among individuals. Histologically, all the bands were made up of endocardium with central core of myocardium. The purkinje fiberes wer edistributed in the subendocardium fibre in each fasciculac were recorded as 2-5. The diameter of the purkinje fibre were 4 times greater than the fibre in each fasciculae were recorded as 2-5. The diameter of the purkinje fibre were 4 times greater than the cardiac musicle fibre. The nuclear diameter of purkinje fibre was more than the same of the cardiac muscle fibre.

(12)

BIONOMICS AND HAEMODYNAMICS OF HAEMOPROTISTANT PARASITISM IN CANINES AT NAGPUR [M.S.]

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Out of the 377 dogs examined, 238 (63.12%) harboured haemoprotista infections. The overall prevalence of infection of Babesiosis. Ehrilichiosis, Haemobartonellosis and Trypanosomiasis was 64.28, 18.90, 4.20 and 0.42 percent respectively. Naturally infected dogs showed significant reduction in haemoglobin, packed cell volume, total erythrocyte cunt, thrombocytes, lymphocytes and monocytes with increase in total leukocyte count and neutrophils.

(13)

STUDIES ON SOURCES AND TRANSFER OF INDIGENOUS TECHINCAL KNOWLEDGE (ITK)

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Farmers are using Indigenous Technical Knowledge since time immemorial. But it is dwindling fast with the death of these ITK bearers. To preserve these ITKs, the following study was done with the aim to find out the sources and channels of communiation and transfer or dissemination of knowledge among ITK practitioners and livestock owners. Among 18 traditional healers, majority of them found information on ITK from fathers whereas among 70 traditional farmers maority were first time aware from their family members. For dissemination, majority of healers were restricted to their sons whereas majority of traditional farmers were restricted to family members only.