VETERINARY SECTION

THE EFFECT OF EXPERIMENTAL VACCINES ON THE REPRODUCTIVE ORGANS OF SHEEP AND GOATS

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The experiment described in this paper was carried out to study the effect of different vaccines on the reproductive organs of sheep and goats. The experimental animals were divided into groups and vaccinated with different vaccines. The results showed that the experimental vaccines had a significant effect on the reproductive organs of the experimental animals. The study also indicated that the vaccines had a positive effect on the health and fertility of the experimental animals.
DEEP MYCOSES OF ANIMALS IN IBADAN

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To date, there is little or no information on fungal diseases of animals in Nigeria. This paper presents ten cases of deep-seated mycoses of livestock observed in Ibadan. They include three cases of phycomycosis affecting cattle, sheep and rabbit, four of Aspergillosis affecting cattle and sheep and three of Nocardiosis affecting cattle. The phycomycosis involved the alimentary tract and adjacent abdominal organs as well as the eye. The Aspergillosis affected the respiratory system and the rumen and abomasum. Bovine nocardiosis affected lymph nodes, skin and mammary gland. As the infective organisms live in the soil and mouldy feeds, improved sanitation in the farm can help to reduce the incidence of these diseases which generally respond poorly to treatment.

T. vivax had abnormalities of sperm morphology (24 to 28%). Degeneration and calcification and occasionally infarction were observed in testes of sheep and goats infected with T. vivax. Firbrin thrombin (detected by Martins Scarlet Blue MSB Stain) were present in some of the spermatic arteries and veins of T. vivax infected goats. T. vivax was present in the amniotic fluid of infected pregnant sheep. The effects of these changes on the reproductive capacity of sheep and goats in endemic areas of trypanosomiasis and the need to carry out similar studies in cattle will be discussed.

THE ECONOMIC EFFECT OF BOVINE DEMODECOSIS ON ANIMAL PRODUCTION IN NIGERIA

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BOVINE demodecosis, a parasitic skin disease caused by a mange mite, Demodex folliculorum bovis, is equally as important as, if not more so than “Kirchi” (cutaneous streptothricosis) a bacterial skin disease caused by Dermatophilus congolensis with which it has been confused for a long time. About 3% of the 10 million cattle population of Northern Nigeria are affected by this disease which is responsible for downgrading of hides and skins. In terms of money, it is conservatively estimated that this disease is responsible for a loss of about ₦300,000 to the hide and skin industry. Since the disease is less common in government owned herds than in local herds, probably due to improved management of regular spraying

THE EFFECT OF EXPERIMENTAL INFECTION OF TRYPANOSOMA VIVAX ON THE REPRODUCTIVE ORGANS OF SHEEP AND GOATS

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Thirteen adult animals (7 sheep and 6 goats) were utilized to study the effect of experimental infection of T. vivax on reproductive organs. Sheep infected with
and/or dipping and provision of balanced a diet, an extension of good management to the local herds through education of herders will greatly reduce losses due to skin infestation by this parasite.

TOXIC NIGERIAN PLANTS WHICH MAY BE THE CAUSE OF ADDITIONAL LOSS OF LIVESTOCK IN DROUGHT CONDITIONS

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RESEARCH is underway in the Department of Veterinary Physiology and Pharmacology, Ahmadu Bello University, on three toxic plants which may contribute to the losses of livestock during drought conditions. They include: Lasiosiphon kraussianus Hutch. & Dalz., called “turu rubi”- in Hausa, which is normally unpalatable but may be eaten when other forage is not available and which is particularly dangerous at the beginning of the rainy season when it sustains lush growth before other species have begun to grow. Gossypium herbaceum L., particularly the cottonseed, which contains gossypol but is normally non-toxic in adult ruminants. Gossypol is more toxic to young ruminants and may cause intoxication in adults when cottonseed constitutes the major source of nutrients. Erythrophymum africunum Harmans, called “sam beru”- in Hausa, which is encountered along the migration routes to the south of Nigeria and is a common cause of poisoning. The danger is considerably increased when the drives are made by inexperienced herdsmen.

HAIR FOLLICLE MEASUREMENTS IN SOME BREEDS OF CATTLE IN NIGERIA

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ANATOMICAL studies of the skin of mature White Fulani, Ndama, Muturu and the Friesian breeds of cattle showed that there are significant regional and breed differences in hair follicle density and depth. The hair follicle distribution per sq. cm. of skin was higher on the neck, ventral and the lateral shoulder and thigh sites (2000-2496) than on the dorsan middise and eye margins (1344-1920). Low densities were recorded on the horn margin, perineum and the limb sites (576-960). This regional distribution was consistent in all breeds except the White Fulani in which follicular densities were significantly lower for some body sites. Hair follicle depth was greater in the Friesian (1.63±0.68 m.m.) than in the Ndama (0.98±0.13 m.m.) the White Fulani (0.91±0.31 m.m.) and the Muturu (0.74±0.25 m.m.). Among body sites follicle depth was significantly greater on the horn margin, limbs, scrotum and the lateral shoulder and thigh (1.16-1.48 m.m.) than on other body sites (0.86-0.98 m.m.). These results will be discussed in relation to the adaptability of these these breeds of cattle to the tropical environment.
ment Plan 1975 to 1980" grain shortages for 1974, 1975 and 1980 were estimated at 0.9, 1.2 and 2.3 million tons respectively. Availability of grains is the limiting factor to Livestock development. If we are to feed Nigerians with the essential animal protein quota, the Federal Government should establish the Grain Board made up of the Ministries, Universities Agricultural Institutes, Feedmills, Consumers, Producers, Nigerian Agricultural Bank and Livestock and Meat Authorities. The grain Board will organise the marketing, storage and producer prices.

In Nigeria today we do not have more than 20 feedingstuffs. We are therefore forced to use feedingstuffs which are in fact far inefficient in terms of cost and nutrient contribution. Import duty at 33.5% makes import sources too expensive per unit of protein.

We need to establish the Nutrient Requirement levels for our livestock in order to reduce excesses, inefficiency and cost of production. The ARC and the Universities are called upon to look into these.

As a short term remedy, the Federal Government should think of paying subsidy on feeds such that the maximum feed cost will be less. (₦110.00 per ton).

At 220 eggs per bird and 45.0 kg feeds eggs will cost 29.5 kobo per dozen on feed costs and 44.5 kobo per total cost per dozen. With producer price of 55 kobo per dozen, the farmer makes about 10.5 kobo per dozen. This will reduce the number of farmer now closing down because they do not make any profit at present. If this is done, the Federal Government will be moved to consider the various ways of reducing the actual feed cost per unit of output.

If actions are not taken in time and correctly the Private Sector will divert its resources into more profitable Businesses with adverse effect on the supply of Protein to the ordinary man and his health and productivity.