

INVESTIGATION OF ETIOLOGY AND PREDISPOSING FACTORS TO DOMESTIC RABBIT DISEASES IN SELECTED AREAS IN KENYA

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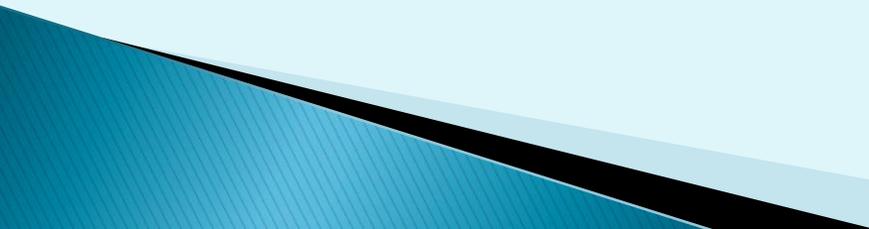
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Date November 2012



1.0. INTRODUCTION

- ▶ Rabbit production is now one of the fastest growing livestock enterprises in the world.
- ▶ highly prolific, early maturity, fast growth rate, high genetic selection potential, efficiency in feed conversion and economic utilization of space (Lukefahr & Cheek, 1990)
- ▶ The estimated rabbit population in Kenya is at 600,000 (APD, 2010)

INTRODUCTION.....continued

- ▶ Rabbit Development Stakeholders Forum (RDSF) was established to spearhead a national campaign to promote rabbit production and consumption.
- ▶ challenges to production Are: Diseases, feed cost, market, sources of breeds (APD, 2010)
- ▶ Knowledge on rabbit diseases is an important gap among existing veterinary practitioners in Kenya (Borter *et al.*, 2010).

2.0. LITERATURE REVIEW

Rabbit Diseases

- **Gastrointestinal, Respiratory, Skin, Reproductive, metabolic and nutritional diseases and disorders and miscellaneous conditions.**
(Martino and Luzi, 2008, Cooper 1973).

ETIOLOGY OF GASTROINTESTINAL DISEASES

Bacterial diseases

Colibacillosis, Salmonellosis (Cooper, 1973).

Escherichia coli and Salmonella spp

Protozoal diseases

intestinal coccidiosis (Aleri *et al.*, 2012), and hepatic coccidiosis
Toxoplasmosis and Cryptosporidiosis

Eimeria spp

*Toxoplasma gondii and
Cryptosporidium parvum*

Viral diseases

*Adenovirus, Rota virus, corona viruses
and Rabbit calicivirus (RCV)*

ETIOLOGY OF GASTROINTESTINAL DISEASES

Complex enteritis

Mucoid enteritis/ Mucoid enteropathy

Combination of bacteria, toxins, dietary irregularities and or obstructions of git

Helminthes

pin worms (*Trichuris* and *Passalurus spp*), *Trichostrongylus spp*, flukes and tapeworms.

Non infectious conditions

bloat (Aleri *et al.*, 2012)
Stressors(weaning, transportation,, feed changes, antibiotics and Moldy feed.

ETIOLOGY OF RESPIRATORY DISEASES

Bacterial agents

Pasteurella spp, *Bordetella spp*, *klebsiella spp*, *staphylococci spp*, *streptococci spp* and rarely *Escherichia coli*, *salmonella* and *listeria*.

Viral diseases

myxomatosis, herpes virus and paramyxoviruses

others

Helminthes *Aspergillosis*

ETIOLOGY OF SKIN DISEASES

Fungal diseases Dermatomycosis/ trichophytosis caused	<i>Trichophyton, Microsporum, Achorion</i>
Ecto-parasites Mange Ear canker	lice and fleas , Mange mites like <i>Sarcoptes spp</i> s and <i>Notoedres cati, Cheyletiella parasitovorax</i> <i>Psoroptes canaliculi</i>
Bacterial diseases Dermatitis and abscesses	<i>Pasteurella spp</i> s, <i>staphylococcus</i> , and <i>streptococcus species</i>
Foot pad abscesses and Sore hocks	Non specific bacteria, predisposed by breeds, wet , dirty hutch floors, and irritating action of urine salts
Viral diseases	<i>Papilloma viruses, rabbit pox virus</i> and <i>Leporipoxvirus</i>

<p>NUTRITIONAL DISEASES</p>	<p>Vitamin A deficiency, Vitamin E deficiency and hypervitaminosis A, hypervitaminosis D and Pregnancy toxemia “ketosis</p>
<p>NEOPLASTIC DISEASES:</p>	<p>Pituitary Adenoma, Thymoma, fibroma, Squamous cell carcinoma,</p>
<p>REPRODUCTIVE DISEASES AND DISORDERS Mastitis, Bacterial Metritis Vulvovaginitis Rabbit syphilis or vent disease,</p>	<p><i>Staphylococcus aureus</i> and <i>Pasteurella spp</i>, <i>Chlamydia spp</i> <i>Proteus spp</i> <i>Treponema cuniculi</i></p> <p>Sterility, twisted uterus, Delayed birth, Parturition outside the nest box, prolapses of the vagina and even abandonment of the litter</p>
<p>CONGENITAL OR HEREDITARY DISORDERS</p>	<p>Glaucoma (Buphthalmia), Malocclusion and tooth over - growth or “wolf teeth,” Splay leg and ataxia)</p>
<p>MISCELLANEOUS CONDITIONS</p>	<p>Trichophagy, trichobenzoars, cannibalism, heat prostration, broken back and intussusceptions</p>

LITERATURE REVIEW... cont

In Kenya, Cooper (1973) concluded that all diseases of rabbits recognized elsewhere in the world exist in Kenya.

- Respiratory and gastrointestinal conditions as the most common (Ngatia *et al.*, (1988))

LITERATURE REVIEW.... cont

- ▶ Diseases of rabbits in Nairobi have increased tremendously by the year 2010 Aleri *et al.*, (2012).
- ▶ Little has been done to find out the causes of mortalities and Morbidities of domestic rabbit (Wesonga and Munda, 1992; Cooper, 1973)
- ▶ Reasons: Knowledge gap, inadequate connection between field diagnoses and confirmatory laboratory diagnoses (Borter *et al.*, 2010)