



ORIGINAL RESEARCH PAPER

Veterinary Science

Efficacy of MINTOSAN liquid in clinical cases of Respiratory Tract Infections in Broilers

KEY WORDS:

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Introduction:

Generally Respiratory diseases occur due to improper ventilation, overcrowding and cold stress. Respiratory problems always lead to poor feed conversion ratio, decreased body weight and mortality.

MINTOSAN a poly-herbal formulation, was developed as an expectorant to relieve from respiratory problems like Coughing, sneezing, Sinusitis, Laryngitis and Pharyngitis. The recommended dose of MINTOSAN in poultry is 15 ml per 100 birds in drinking water.

The pharmacological activities of individual ingredient present in MINTOSAN are reported as per 100ml : 10 % Eucalyptus oil, 8 % Ocimum sanctum, 10% menthol, 3% Thymus vulgaris and 5% Mentha piperita.

Materials and Methods:

The present trial was conducted on a flock of 500 broilers of 20-day old. 10% mortality was recorded at 19th day of age, and then post mortem examination was conducted.

Rhynitis, Sinusitis, Catarrhal exudates in trachea and bronchii and cheesy material in air sacs were the major observation. During the poultry farm examination (Singh Poultry House, Rampur tiraha, Saharanpur Road, Dist. Muzaffarnagar, India), Sneezing, coughing, nasal secretions, respiratory sounds and gasping were noticed in about 35% of broilers.

After evaluation of post-mortem reports and laboratory finding Chronic Respiratory Disease (CRD) was confirmed.

To evaluate the efficacy of MINTOSAN, the broilers were divided into four groups, randomly.

S.	Group (125 Broilers)	Therapeutic Agents	Dose Rate
1	I	MINTOSAN	15 ml per 100 birds
2	II	Tylosin tartarate (62.5% tylosin)	176 mg per Kg body wt.
3	III	MINTOSAN+Tylo sin tartarate	15 ml per 100 birds +176 mg per Kg body wt.
4	IV	No Medicine	-

Except, these two-MINTOSAN and tylosin tartarate, no other medicine and feed supplement were used during the course of treatment.

Post mortem examination was conducted regularly of all the four groups. During the treatment, the broilers were kept on ad libitum water and feed supply.

Result and Discussion:

A little improvement was noticed in group-I. 2% mortality was observed in group-I. Symptoms like gasping, depression and nasal secretion were less intense after 7 days of treatment. After 14 days of treatment, symptoms like gasping and coughing were found only in 15% of broilers. After 20 days, only coughing persisted in 10% of birds. Group I shown little recovery as CRD is caused by MYCOPLASMA.

In group-II, the disease is resolved within 5th day of treatment. No sign of cheesy material in trachea was noticed in P.M. examination.

Mortality due to CRD was not recorded in second and third groups.

Group-III broilers were shown a remarkable recovery with MINTOSAN and tylosin tartarate. Postmortem proved no presence of catarrhal exudates in trachea and bronchi, no cheesy material in air sacs. Clinical symptoms like Coughing, Sneezing and Nasal secretions were completely subsided at third day of treatment.

The antibacterial, anti-inflammatory, anti-histaminic, expectorant and antipyretic action of MINTOSAN greatly enhance the efficacy of MINTOSAN. Also, MINTOSAN helps to increase the body resistance and its carminative and stomachic-like action also restores the appetite.

The IV group of broilers was shown no improvement; rather mortality rate was increased to 20% due to secondary infection.

S.	Group(20 No.0 Broilers)	Results
1	I	A little improvement was noticed in birds after 7 days
2	II	The disease resolved within 5th day of treatment
3	III	A marked improved was noticed within 3rd day.
4	IV	No improvement was shown & mortality rate is increased up to 20% due to secondary infection.

Summary:

This shows that MINTOSAN is an excellent supportive therapy along with a specific antibiotic agent in case of respiratory tract infections like CRD, Coryza and Pneumonia. No any side effect was noticed during the trial, hence the drug is proven harmless and it can be used safely. Due to its efficacy and economical price, this drug can be extensively used in poultry industry.

Acknowledgement

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