Contents

Summary

This study was applied mainly on (127) animals and obtained results showed that a total of (83) buffaloes and (44) cows were under investigation including (79) animals were apparently normal ((27) cows and (52) buffaloes) while the remaining (48) animals conditionally diseased included (17) cow and (31) buffaloes. Concerning diseased animal (8) cows were positive with percentage of (47.05) out of (31) diseased buffaloes (14) were positive with the percentage of (45.16) so (22) out of (48) diseased animal were positive with the percentage of (45.8) while (14) out of (27) apparently healthy cows were positive with the percentage of (51.8) and out of (52), apparently healthy buffaloes (33) were positive with the percentage of (63.4%) .

A total of (508) samples collected from nose (127), trachea (127) & lymph nodes (127) and lung specimens (127) in case of nasal swabs (79) from apparently healthy animals which give (41.8%) positive and (48) from diseased animals and give (50%) positive cases, (127) tracheal swabs (79) from apparently healthy animals and give (32.9%) positive, and (48) from diseased animals and give (50%) positive cases. Including also lymphnodes specimens (79), from apparently healthy animals

yielded (26.5%) positive cases and (48) from diseased animals (45.8%) were positive cases. And including lung specimens (127) which divided as (79) from apparently healthy animals yielded (25.8%) positive cases and (48) from diseased animals (60.4%) were positive cases.

So Mycoplasma were isolated from (127) animals including (79) apparently healthy and (48) diseased animals with the percentage of (59.5%) & (45.8%), respectively.

The most prevalent isolates of Mycoplasma were *M.bovis* whose recovery rate was (36.46%), *M.bovirhinis* was isolated with the percentage of (27.44) and *M.bovigenitalium* and *M.arginini*. with the percentage of (19.25) and (9.41), respectively and *Acholeplasma aidlawii* with the percentage of (7) .

Infected cows and buffaloes with Mycoplasma showed different degrees of pneumonia congestion in nasal tract, exudate intrachea. & inflammation of some lymphfollicles .

In the present study antibiotic sensitivity for isolated mycoplasmas was applied in vitro and the results were referred to that Enrofloxacin, Followed by lincospectine and timicosin could be considered as the most effective antibiotics against

M.bovirhinis, M.bovigenitalium, M. arginini and M.bovis, but Danofloxacin, neomycin and vibramycin were the least effective antibiotic against the myloplasma .

Conclusion

The conclusion of the present study may be summarized as follow:

1- Mycoplasma plays an important role in respiratory tract infection in cows and buffaloes .

2- *Mycoplasma bovis* was the most prevalent isolates from diseased and apparently healthy cattle and buffaloes.

3- All diseased cases showed respiratory manifestation with different degrees.

4- Post-mortem examinations in nasal cavity exudates in trachea, different degree of pneumonia in lung were noticed.

5- Immunoperoxdase test was used to identify the isolated *Mycoplasma species* and was proved more rapid than the standard cultural welled method.

6- Antibiotic sensitivity test was applied and revealed that Gentamicin, Enrofloxacin and lincospectine were the most effective antibiotic against Mycoplasma isolates, in vitro.