

May 25, 1978

Mycoplasma Committee Report

The committee focused in on industry problems caused by mycoplasmas. There was close agreement among the members regarding the areas requiring the most attention. These were Mycoplasma gallisepticum in the commercial layer, Mycoplasma meleagridis in the turkey breeder, identification problems, the need for diagnostic procedures, and further exploration of a killed M.g. vaccine.

The presence of Mycoplasma gallisepticum in multi-age egg laying complexes is viewed as a reservoir and threat to the rest of the poultry industry. Priority should be given to reducing and preferably eliminating this disease threat. Procedures which will do this should continue to be researched and perfected.

M.g. eradication has been seen as a viable alternative in a multi-age complex, and additional complexes have eliminated mycoplasma breaks in their flocks by following the previously described approach. The committee also applauds the efforts by Dr. Mallinson to quantitate the advantages of M.g. eradication in layers.

Mycoplasma meleagridis is seen as a serious problem in turkey breeders and the committee recommends continued steps in its complete eradication.

Rapid identification of mycoplasma organisms, both pathogenic and non-pathogenic, is not readily available to the poultry industry. Researching and implementing rapid, accurate techniques is encouraged. The significance of some mycoplasma species in the production of disease, is not known. Additional research is needed to illuminate these areas of identification and significance of mycoplasma.

Serological procedures and satisfactory antigens are still needed for more accurate diagnosis of mycoplasma infections. Standard procedures and reagents are not in common use for the confirmation of suspected cases. Repeatability of tests between laboratories is not always present.

The possibility of immunizing the respiratory tract with the aerosol application of a killed mycoplasma organism is interesting. This procedure, if successful, would offer commercial laying complexes with some insurance against a severe break of mycoplasma in the middle of an eradication program. The committee is nearly unanimous in the need for further exploration of such an approach. Certainly if such a product were used successfully, it could lead us to a more rapid eradication of M.g. from a multiple age complex. It could also provide protection for turkeys against the risk of exposure in high risk areas.

These problems, being the greatest source of industry difficulty, are seen as the areas most deserving of research attention.

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