

## AAAP MYCOPLASMOSIS COMMITTEE

### 1969-1970 Report

The committee did not conduct any formal meeting this past year. We attempted to pool our thoughts via correspondence primarily concerning the problem of increased condemnations due to airsacculitis in broilers in certain areas of the U. S. Essentially no other topic received sufficient comment to be worthy of mention.

One single reply supported the conclusion that Mycoplasma synoviae could actually be "involved" in broiler airsacculitis of an extent severe enough to cause condemnations. Two reports rather strongly doubted the possibility that M. synoviae could be a part of the airsacculitis complex.

As chairman of the committee I feel that my own personal opinion is not at all representative of the members this year. As an individual I feel very strongly that M. synoviae is "involved" in the final lesions causing some airsacculitis condemnations. Further data will be presented by Dr. Frank Siccardi during this meeting, but a very brief summary of my own laboratory studies are presented here for your information.

Condemnations due to airsacculitis in broilers were greater than usual in numerous flocks in several states, especially during February, March and April of 1970. Most of these flocks were reported to be from M. gallisepticum free breeders. An attempt was made to investigate several of these flocks with moderate to severe airsacculitis condemnations. All specimens were collected at the processing plants. Information on the breeder parents was sometimes available for further study. Some general conclusions are:

1. A total of 15 flocks of broilers with extensive airsacculitis condemnations was examined at 5 different processing plants in 3 states.
2. M. synoviae serology was predominant but numerous M. gallisepticum reactors were also apparent. Many of these proved to be only typical cross-reactions by further studies with both M.S. and M.G. HI systems.

3. Cultures of Mycoplasma were obtained from a very high percentage of air sac lesions and tracheal swabs (often 3 out of 4).

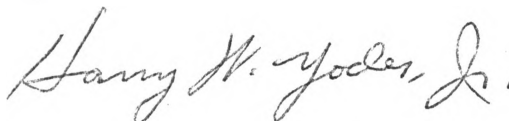
| <u>Mycoplasma Cultured</u>   | <u>Number of Flocks</u> |
|------------------------------|-------------------------|
| <u>M. gallisepticum</u> only | 3                       |
| <u>M. synoviae</u> only      | 10                      |
| <u>M.G.</u> and <u>M.S.</u>  | 2                       |
|                              | <hr/>                   |
|                              | 15                      |

4. E. coli was present in some of the air sac lesions from most all of the 15 cases studied.

5. Preliminary studies have proved beyond doubt that representative isolates of the M. synoviae cultures from air sacs are pathogenic in terms of being capable of producing typical severe infectious synovitis. Broth culture inoculations via aerosol, intratracheal or air sac routes have essentially failed to produce gross airsacculitis, but M. synoviae was readily isolated from tracheal swabs for at least 6 weeks post inoculation.

This mass of circumstantial evidence strongly suggests that M. synoviae is somehow associated with certain cases of severe airsacculitis, which often is of the silent type. Possibly M. synoviae is capable of being one of the several factors in the usual complex which results in extensive airsacculitis. Further study is essential.

Respectfully submitted



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