

## 6. Summary

### **Comparative study of housing conditions in turkey flocks and the influence of the results in the meat inspection**

According to Chapter 1 of the GlHV, dated December 3<sup>rd</sup>, 1997 feedlots of Poultry fattening are required to collect Data from the housing conditions of the animals.

Taking these fattening data into consideration during official veterinarian Examinations is designed to getting the best possible Information about the flock. Results of the ante mortem examination are to be examined or explained by its origination, to be able to determine the general health condition of a herd.

This Research was done with the goal of tracing possible causes of Fibrinous Serositis, by taking into consideration the Information of the flock of origin as well as the corresponding data at slaughter.

In Course of the Study, 48.000 male Turkeys of the meat hybrids BIG-6 were observed regularly every four weeks during the fattening and afterwards from the meat inspection. The 10 chosen Turkey feedlots were split into two groups due to occurred cases of Fibrinous Serositis to date.

The Living Turkeys were monitored with an examination sheet, which was divided into three sections, called the farm record. In Terms of the operating data, the data of the management and other factors including a clinical examination, there were differences between the herds of Group 1 and Group 2 regarding Stables (Size, etc.) Caretakers, Hygiene (change of clothes, Desinfection, Cleanliness of feeding tins), time between fattening periods, control measure of *Alphitobius diaperinus*, Concentration of Ammonia in the air, number of animals that died in the fattening and weight of the individual animals. Often it was just one flock that tipped the scale and made the difference to the other group.

During the meat inspection, the differences between the surveyed Herds were able to be determined. Differences were found during the following parameters:

- Number of animals that died in the fattening
- Carcasses unfit for human consumption
- Percentage of the carcasses which are unfit in respect to the number of Animals in the origin flock
- Percentage of Turkeys displaying Fibrinous Serositis
- Number of the Animals with breast blisters

The selection that was made in respect to the Fibrinous Serositis was maintained.

Summing up the husbandry conditions and taking into consideration the determined code, there is an explicit difference between the two groups. Group 1 has much better results to Fibrinous Serositis than Group 2. Two feedlots whose results differed severely were compared to determine the differences. The following differences were determined, and they should, if necessary, be examined further in future investigations:

- distance of Stable to cadaver place
- habits of clothes – changing of the caretakers
- cleanliness of feeding tins
- stocking density

This leads to the conclusion, that the meat inspection do confirm the circumstances of fattening. This makes clear, that the Hygienic circumstances of the keeping of the animals is influential. If the abattoir files too many negative reports, an intervention is recommended and regarded helpful.

Due to the differences between the groups, it is possible to give parameters, that could be seen as ways to determine the origins of Fibrinous Serositis.

The following points are of special interest, taking into consideration the parameters that have shown differences between the two groups:

- human caretaking
- Hygiene
- Time between fattening periods
- (Concentration of Ammonia in the air)
- Number of animals that died in the fattening

It was found out, that the smallest possible differences can “open a window”, or cause the spreading of facultative pathogenic micro-organism.

The Studies have shown, that the general standard of Hygiene alone cannot be held responsible for Fibrinous Serositis, but that bad hygienic circumstances are perhaps beneficial to the origins of the disease.