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## **SPREAD THE MALLOPHAGS OF CHICKENS IN FARMS OF POLTAVA REGION**

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*Research has found widespread Mallophags of chickens in farms in the Poltava region (Zenkov, Pyryatyn, Gadyach and Carlovka region). Extensity of infestation averaged 53,3 % to the intensity of infestation  $3,8 \pm 0,01$  ekz./10x10 cm of the bird's body. On the territory of the Poltava region in chickens has found four types Mallophags: three kinds of family Menoponidae (Menopon gallinae, Menacanthus stramineus, Menacanthus cornutus) and one species of the family Gonioididae (Goniocotes hologaster).*

**Keywords:** chickens, Mallophags, extensity, intensity of infestation, species Mallophags.

**Setting the problem.** With the concentration of a large number of livestock poultry in a limited area, ie high density planting, enough high-tech temperature and humidity, long cycle maintenance of egg laying poultry in a poultry house creates ideal conditions for intensive development of populations of ectoparasites [1].

Malophagozis (disease of chickens caused ectoparasites that eating feathers) – a problem that may have been a common and important for all technological forms of poultry industry [2].

Mallophags, when fed gangrenous epidermis, blood, lymph and fatty secretions, skin damage birds often eat the cover of feathers, and sometimes all a fan. Disease in poultry body surface, Mallophags cause irritation nerve receptors – there is itching, down feathers, which are stress factors adversely affecting overall chickens.

**Analysis of recent research and publications, which discuss the problem.** Our analysis of the literature indicates that Mallophags distributed on all continents. Domestic scholars argue Mallophags widespread among chickens poultry farms Ukraine. In many poultry houses infestation Mallophags poultry livestock is 100% [6].

According Nagorna L.V. in egg-laying poultry farms of industrial type and specialized broiler farms the agents of ektoparazytosis are absent.

The wide spread Mallophags of poultry report not only domestic but also foreign researchers. The high infestation of birds of Mallophags doctors diagnose the United States, South Asia and Africa [2]. Extensity of infestation in poultry farms in Europe ranges from 53 to 92% [2].

Distribution and species composition Mallophags in farms of Poltava region studied enough because this issue in the region is extremely important, and this is determined by the choice of theme of this study.

**Aims and objectives of research.** The purpose of our work – study dissemination of Mallophags of chicken in farms of Poltava region. To the objectives enter the study of species composition of parasites and determining the extensiveness and intensity of infestation (EI and II).

**Materials and methods of research.** The study was conducted during the 2011-2012, based on poultry farms of Zenkov, Pyriatyn, Hadiach and Carlivka districts of Poltava region with underfloor technology poultry of different ages. Examined egg laying breeds crosses High Line, Tetra-SL, Lohman White, Lohman Braun and Brown Nick.

Parasitological study, including microscopy of Mallophags performed at the laboratory of parasitology and veterinary-sanitary examination of Poltava State Agrarian Academy.

Total number of surveyed is 645 goals.

In order to study the spread malophags conducted clinical examination of chickens and collecting insects, especially paying attention to the overall cover of feathers. Studied bird selectively to 10 individuals in small farms and, in poultry houses where the number of chickens there were more than a thousand - were examined in 10 chapters of every thousand five points of the room. Birds examined, feather plucking hand. Note that the feathers healthy birds was smooth and shiny, feathers tightly adjacent to each other. Fragility, damage feathers and rods indicative of contamination of poultry ectoparasites. On the back, head, around the cloaca and under the wings found Mallophags in various stages of development.

After surveying birds and insects count detected on the body surface chickens determined the degree of infestation of Mallophags (extensity and intensity of infestation). Selected from the skin of poultry Mallophags fixed in 70°-th ethanol, followed by preparation of drugs and determining the species composition of parasites.

**Results of research.** The results of parasitological examinations of chickens poultry farms Poltava region revealed widespread invasion of Malophags Zenkov, Pyriatyn, Gadiach and Carlivka areas (Table 1).

In general, the surveyed farms set high infestation of chickens agents of Malophags (EI = 53.3%, II = 3,8 ± 0,01 cm<sup>2</sup> ekz./10 bird body surface).

### *1. Spread Malophags of chicken in farms of Poltava region*

<b>Districts</b>	<b>Number of livestock (heads examined)</b>	<b>EI, %</b>	<b>II, ekz./10 cm<sup>2</sup> (min-max)</b>
Zenkov	3171 (285)	64,29	4,5-6,0
Karlivka	1918 (105)	18,63	1,5-2,0
Pyryatyn	1855 (120)	58,3	3,43-4,3
Gadyach	1499 (135)	71,85	4,29-4,6
<b>Total:</b>	8443 (645)	53,3	3,43-4,22

Extensivity damage of Mallophags of chickens in farms of Poltava region ranged from 18.63% to 71.85%. Maximum damage was observed in birds Gadiach district (71.85%), the average intensity of infestation with was  $-2,96 \pm 0,01$  ekz./10 cm<sup>2</sup>.

Infestation of birds of Zenkov and Pyriatyn areas was 64.29% and 58.3% for the average intensity of infestation  $5,25 \pm 0,02$  and  $3,87 \pm 0,01$  ekz./10 cm<sup>2</sup> respectively.

In the area of poultry houses in Carlivka dostrict extensivity of infestation was low (18,63%). Average values of intensity of infestation –  $1,75 \pm 0,01$  ekz./10 cm<sup>2</sup>.

In the Poltava region in chickens, four types Mallophags: three types of family Menoponidae (Menopon gallinae, Menacanthus stramineus, Menacanthus cornutus) and one species of the family Gonioididae (Goniocotes hologaster).

Most species showed Menopon gallinae, Menacanthus stramineus and Menacanthus cornutus, which were found in the contour feathers second and third orders, as well as covering feathers of the body. The inner surface contour feathers of the second order of the medial surface of the wings showed white, translucent, elongated eggs of insects.

Less frequently found species Goniocotes hologaster. Ectoparasites of the type localized on the skin of the trunk, near the cloaca on the ventral surface of the body, small feather feathers.

#### **Conclusions:**

1. Found a significant infestation of chickens of different age groups pathogens Mallophags in farms of Poltava region. Extensivity of invasion, on average, accounted for 53,3%, the intensity –  $3,8 \pm 0,01$  ekz./10 cm<sup>2</sup>.

2. In the Poltava region in chickens, four types Mallophags: three types of family Menoponidae (Menopon gallinae, Menacanthus stramineus, Menacanthus cornutus) and one species – a family Gonioididae (Goniocotes hologaster).

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