PHARMAPEX®
CREATING A HEALTHY WORLD™

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# Method of Assay

## EVALUATION OF INTESTINAL MICROFLORA

Two separated groups were selected including 20 broilers in each one. The first group was considered as a Control Group (not treated group). In second group, broilers received Florablend™ product during 3 first days of cycle (based on recommended concentration by manufacturer) in their drinking water.

Eight birds from each group were post-mortem examined and evaluated intestinal content to detect type and number of intestinal microflora at first day (before the beginning of assay) and days 3, 7, 14 and 21.

## EVALUATION OF PRODUCTION PERFORMANCE

One hundred of one day broilers were divided into 2 equal groups (each group consisting of 5 sub-groups including 10 birds), we considered first group as a Control Group. The second group received Florablend™ product in its drinking water during 3 first days of cycle (based on recommended concentration by manufacturer).

The indexes of production such as increasing of body weight, food intake, food conversion ratio (FDR) on days of 14, 21, 28 and 42 in addition to efficiency rate of production at the end of experiment (on day 42nd) were measured.

## METHOD OF CLINICAL, EXPERIMENTAL AND STATISTICAL ANALYSIS

Obtained results regarding to the aforesaid indexes have been received through T-Test & ANOVA in a 95% level of confidence.

## RESULTS

**Evaluation of Intestinal Microflora**

The results showed that consumption of Florablend™ Group, into drinking water for 3 days, had caused to increase numbers of Lactobacilli bacteria (on the third day of cycle) in each gram of contents inside intestine more than 4 times, (in the receiver group of Florablend™ ($5.33 \times 10^8$) compared to the control group ($1.13 \times 10^8$).

The amount of the bacteria in Florablend™ receiver group had counted more than 3, 4 and 5 times in comparison with control group, respectively on days 7th, 14th, and 21st of breeding.

The number of coliforms bacteria on day 21st of breeding into control group ($12.83 \times 10^3$ bacteria content inside intestine) were 2 times more than into Florablend™ receiver group ($5.63 \times 10^3$ bacteria ).

The number of cocci on days 7, 14 of breeding into Florablend™ receiver group were remarkably fewer than control group (respectively $2.83 \times 10^3$, $1.93 \times 10^3$ in comparison with $8.83 \times 10^3$, $6.23 \times 10^3$).

In summary, the results of evaluation intestinal microflora, in different parts of the cycle, periodically, indicate that use of Florablend™ product has caused a change of intestinal microflora toward Lactobacili.

**Evaluation of Production Performance:**

In respect to effect of Florablend™ on performance of broilers, given results of this trial shows, in comparison with control group, use of this product in tree first days of breeding causes a meaningful growth in body weight from day 21st to the end of trial (respectively in amount of 6.5%, 4.9% and 4.5% on days of 21, 28 and 42). However, the use of this product causes to increase a moderately the food intake in comparison with control group (approximately 3%), observed differences were not statistically significant. The food conversion ratio (FDR) in chicken obtained in Florablend™ receiver group was less than control group during the whole trial. As it is observed, it nearly decreases 1.5% in comparison with control group on day 42nd. At the end of trial (on day 42) efficiency rate of production in Florablend™ receiver group increases meaningfully compared to the control group (5.8%).

Briefly as a consequence, based on this study, in respect to the measured indexes of production, we can claim that the use of Florablend™ into the drinking water in 3 first days of cycle causes an increase in production performance of broilers.

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## DATA TABLE: CONTROL VS. TREATMENT

| PARAMETER | CONTROL | TREATMENT LOT |
|---|---|---|
| Lactobacilli Bacteria/ gram of intestinal microflora on the 3rd day | 1.1 x $10^3$ CFU/gr | 5.3 x $10^8$ CFU/gr |
| Beneficial Bacteria on day 7, 14, and 21 | X | 3X to 5X more, respectively |
| Coliform Bacteria on day 21 | 12.8 x $10^3$ CFU/gr | 5.6 x $10^3$ CFU/gr |
| Cocci on: | | |
| Day 7 | 8.8 x $10^3$ CFU/gr | 2.8 x $10^3$ CFU/gr |
| Day 14 | 6.2 x $10^3$ CFU/gr | 1.9 x $10^3$ CFU/gr |
| Body weight | | |
| Day 7 | | 6.5% increase |
| Day 14 | | 4.9% increase |
| Day 21 | | 4.5% increase |