

## THE EFFECT OF *CHLORELLA VULGARIS* IFR-111 ON MICROFLORA OF THE DIGESTIVE SYSTEM OF NEONATE CALVES

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**Summary.** The suspension of green algae *Chlorella vulgaris* is an ecologically clean, natural product easily assimilated by the organism of the animal. It contains all irreplaceable amino acids, vitamins, micro- and macroelements, unsaturated fatty acids, enzymes and others. Due to so rich chemical composition *Chlorella* is considered to be a natural biological stimulator of the organism.

The objective of this experiment was to examine the effect of *Chlorella vulgaris* IFR-111 on microflora of the digestive system of German Black & White calves. Sixteen neonate calves were divided by stratified random sampling according to sex and weight into 2 groups – control (Group 1) and experimental (Group 2) each of 8 calves. Group 1 was fed diet formulated on milk with start feed for calves „Milaflo“ and Group 2 was fed milk plus „Milaflo“ supplemented with 400 ml (twice daily x 200 ml) of *Chlorella vulgaris* IFR-111 suspension in concentration  $10.8 \times 10^9/l$  (Спруж, 1990). The experiment lasted for 30 days. Faecal samples were collected from the rectum the day after arrival and once a week. The total number of enterobacteria, lactobacillus, aerobic and facultative anaerobic bacteria and enterococcus were determined.

There were no statistically significant influence of *Chlorella vulgaris* on the microflora population of the digestive system of experimental calves. However, in Group 2 the total count of enterobacteria was on 4.1 %, lactobacillus on 3.3 %, aerobic bacteria on 3.9 % and enterococcus on 0,4 % lower compared to the controls in Group 1 ( $P > 0.05$ ). In both groups the age of calves had statistically significant influence on microflora composition. During 30 days period the total count of enterobacteria increased on 22.4 %, lactobacillus on 18.7 %, aerobic bacteria on 32.0 %, and enterococcus on 16.3 %, respectively ( $P < 0.05$ ).

**Key words:** *Chlorella vulgaris*, microflora, feed, calves.