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The Effect of a Decotion Prepared From Ferula Assafoetida Plant Grain on Clinical Indications of Male Rabbits

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Annotation. The article presents information on the effect of biologically active substances contained in the seeds of the Ferula assafoetida plant, belonging to the Ferula family, on the clinical signs of male rabbits.

Keywords. Ferula L., F.assafoetida, coumarin, terpenoid, ether, vitamin, microelement, tefestrol, zafarol, tincture, nastoyka, mg/kg.

Introduction. Today, the importance of the use of natural medicines for the prevention and treatment of various diseases in the livestock industry is being proven. Because it has been found in science that the means synthesized by chemical methods, i.e. substances that do not occur naturally, together with being a cure for diseases, have negative effects on various organs and tissues of the body.

Interesting studies on the study of plants belonging to the Ferula L family began mainly in the 20th century, and by studying the chemical composition of this plant, existing problems in their systematics began to be solved.

Ferula seeds ripen in late May and early June, 1000 seeds weigh 28-30 grams. The weight of the seed also depends on weather conditions, and its size increases in rainy years. When stored in good conditions, the seed remains viable for 6-7 years. Four-year seed germination is 45-50%, and according to this classification, it belongs to mesobiotics. Fertilization of mesabiotics can be maintained for 3-15 years and regularly decreases.

All compounds isolated from the plant are divided into group 3: coumarins, terpenoid and sesquiterpene alcohols of complex esters, and sesquiterpene lactones. $C_{15}H_{19-27}O_{11-4}$ sesquiterpenoid residue is found in all three groups.

Raw material and solvent 1:10 are taken to prepare decoction from Ferula assafoetida plant grain. According to this, 30 g of F. assafoetida grain is taken and crushed in a mortar to 0.5 mm in size. 300 ml of water is taken and placed in special containers of the infuser apparatus, taking into account the amount of water consumed in the process of boiling and filtering. will be served. Due to this, the total amount of water is 375 ml. A few drops of citric acid are added to the solution so that the alkaloids contained in the seeds are completely broken down.

The liquid is thoroughly mixed in an infuser and boiled in a water bath for 30 minutes. After that, the decoction is cooled for 15 minutes and put through a strainer into special containers.

Research results. In the first experimental group, male rabbits, who were given 15 ml of a decoction made from the grain of the Ferula assafoetida plant, observed the general condition of the rabbits during the experiment, body temperature, pulse, respiration, reaction to food and water, weight, and the condition of the mucous membranes and skin. it was observed that the indicators were more sensitive than those of the control group rabbits. In particular, in the rabbits of the first experimental group, before the experiment, the body temperature was 39.4 ± 0.2 C⁰, heart rate was 130 ± 0.7 , respiration rate was 50 ± 0.1 , and after 10 days, these indicators were respectively body temperature was 39.6 ± 0.1 C⁰, heart rate was 143 ± 0.9 , respiration rate was 56 ± 0.3 .

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Experimental group	Experience	temperatu	(pulse,	breaths	Body weight, kg	Daily gain (gr)	Total growth (gr)
First group	Until the experience	39,4± 0,2	130±0,7	50± 0,1	3,8± 0,2		
	10 th day	$39,6\pm0,1$	143 ± 0.9	56± 0,3	$4,1\pm 0,1$	23 ± 0.7	230
Second group	Until the experience	39,2± 0,3	125± 0,3	51± 0,7	3,9± 0,1		
	10 th day	$40,3\pm0,1$	142± 1,0	57± 0,1	4,4±0,07	24 ± 0.5	240
Control group	Until the experience	39,3± 0,2	132± 0,7	54± 0,3	$3,7 \pm 0,1$		
	10 th day	$39,2\pm0,2$	129± 0,5	52± 0,2	3,9±0,05	20± 0,7	200

Ferula assafoetida plant grain decoction added 20 ml every day for 10 days in the second experimental group male rabbits in the first days of the experiment, their general condition, body temperature, pulse, respiration, reaction to food and water, weight, mucous membranes and skin condition scores were not different from those of the control rabbits, but they showed higher sensitivity and mobility compared to the control rabbits. In particular, in the rabbits of the second experimental group, before the experiment, the body temperature was $39.2 \pm 0.2C0$, the heart rate was 125 ± 0.3 , and the respiration rate was 51 ± 0.7 . After 10 days, these indicators were respectively temperature was 40.3 ± 0.1 CO, heart rate was 142 ± 0.9 , respiratory rate was 57 ± 0.1 .

Male rabbits in the control group were fed according to the diet, and their general condition, body temperature, pulse, respiration, reaction to food and water, weight, condition of mucous membranes and skin were monitored. As can be seen from the table, male rabbits in the first experimental group had a daily increase of 23 grams by the end of the experiment and a total increase of 230 grams, while male rabbits in the second experimental group had a daily increase of 24 grams by the end of the experiment and a total increase of 230 grams. was 240 grams, while in male rabbits of the control group, these indicators were 20 grams and 200 grams, respectively.

Summary. So, in the experiments, the first group of male rabbits, given 15 ml of a decoction made from the grain of the Ferula assafoetida plant, increased daily and total growth by 3 and 30 grams, respectively, compared to that of the male rabbits in the control group. In the second experimental group of male rabbits given 20 ml of the decoction made from the grain of the silkworm, it was noted that the daily and total growth of male rabbits increased by 4 and 40 grams, respectively, compared to those of male rabbits in the control group.

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