ABSTRACTS

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c.7.70 THE DEMONSTRATION OF NEMATOPHAGOUS ACTIVITY OF DRIED *DUDDINGTONIA FLAGRANS* PREPARATION AFTER ITS PROLONGED STORAGE

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In the studies on the schemes of predacious fungi usage for biological control of zooparasitic nematodes the fungal preparations were used immediately after growing, not after prolonged storage. The objective of our investigation was to reveal the ability of the predacious fungus *Duddingtonia flagrans* to retain the nematode-trapping activity in fecal cultures *in vitro* after the prolonged storage of dry grain preparation.

Dry preparation of two strains of *Duddingtonia flagrans* was used in experiment. It has been grown on barley grains and was stored during 6 months at room temperature and humidity. Two horses naturally infected by strongylid nematodes were fed on 500 g of the grain preparation. Daily the fecal samples were collected from each horse, the number of eggs was counted and the samples were cultivated in the thermostat during two weeks. The estimation of the decrease of the number of strongylid infective larvae was carried out on the 7th and 14th days of culturing. Fecal samples collected from the same horses on a day before experiment were used as the control.

The predacious fungus was revealed in fecal cultures in vitro on the 2nd day of experiment. It has demonstrated high nematophagous activity against infective larvae of horse strongylids: up to 98.6% of larvae eliminated on the 7th day and 99.9% - on the 14th day of cultivation (comparing with 20.5 and 25.5% of died larvae in control cultures respectively).

The results obtained confirm the ability the dry barley grain preparation of predacious fungus Duddingtonia flagrans to retain its nematophagoous efficacy after prolonged storage (during at least 6 months) and thus it may be recommend for industrial usage for biological control of zooparasitic nematodes.