

## **Abstract**

Diploma thesis generally compares individual success pigeons in spatial tasks of varying complexity (in a role that requires abstraction of visual stimuli representing spatial relationships on the touch screen using two different strategies and spatial search task the middle plate of a series of plates with different variants of location) with hierarchical status of males and group females.

Specifically thesis compares individual success pigeons in spatial tasks of varying complexity. The hardest task requires a certain level of abstraction of visual stimuli representing spatial relationships using experimentally induced two strategies: mapping strategy or specific symbol association with a position in space. The role tests on the touch screen with the help of operant conditionings. Difficulty in various stages of growing, the last stage role does manage only some individuals. Conversely easier task in real space with a bird tasked with finding the midpoint between objects in different variants locations within the arena. The difficulty of the task is not growing, and it can solve some individuals who have not learned operant conditioning if the previous job. Performance in cognitive tasks could be affected by the hierarchical status of the animal in the group. Pigeons position in the hierarchy has been tested repeatedly dyadic attempts separately for males and females. Dominance index for both sexes was compared with known cognitive success, but the apparent correlation was not found.

**Keywords:** spatial cognition, abstraction, searching centre task, hierarchy