BLACK SOLDIER FLY LARVAE MEAL AS FEED INGREDIENT FOR LABORATORY MICE

L. Caisîn1*, L. Bivol1, E. Cibotaru1

¹Technical University of Moldova, Faculty of Agricultural, Forestry and Environmental Sciences, Animal Resources and Food Safety Department, Chisinau, Republic of Moldova *e-mail: larisa.caisin@mpasa.utm.md

Abstract

The condition of laboratory animals chosen for biomedical experiments—such as their appearance, health, genetic consistency, and the care, maintenance, and feeding they receive-has a significant impact on the outcomes and conclusions of experimental research. In experiments testing the effects of various substances, it is often necessary to determine the concentration of the substance being studied. However, animals can sometimes gain excess weight beyond the normal range for their age during feeding, and alterations in internal organs are commonly found during post-mortem examinations.

Laboratory mice have unique dietary requirements that must be met to support their growth, reproduction, and immune responses to pathogens or environmental stress from handling and experimental procedures.

The aim of this study was to examine the changes in growth in mice when black soldier fly (BSF) larvae meal was added to their diet. The results showed that a 4.0% inclusion of BSF larvae meal had a positive effect on the growth of the laboratory mice compared to those fed a standard diet. Overall, BSF larvae could serve as a viable alternative protein source in animal feed.

Key words: laboratory mice, BSF larvae meal