

## **Abstract**

Interdependence between the thermal regime of the soil and the depth at which there is the most significant hypothermia tolerance was put into evidence under 2006-2009. In 2006, after a more severe winter, the most numerous hibernating adults were recorded in the layer of 31-40 cm, while in other years at a depth of 26-30 cm. Below and above these depths hibernating adult population has diminished under the years 2007 to 2009. This is due to hypothermia in the superficial layers of the soil, and in the deepest (below 30-40 cm), adults debilitation, as a result of increased consumption of carbohydrates and fats during break time and high crossing thicker soil layer.

**Key words:** heat treatment, mortality, adults hibernate, tolerance, hypothermia density