

THE ANNOTATION

As part of the bachelor's thesis, the development of an automated incubator management system was carried out. The work includes a detailed description of the technological process of incubation, which is used to grow various types of birds. Incubation regimes that provide optimal conditions for the development and survival of chicks are considered.

One of the main achievements of the work is the development of a system that provides more accurate maintenance of temperature regimes during the incubation process. This is achieved through the use of modern technologies and components such as microcontrollers and high precision sensors. Precise temperature control allows for optimal conditions for the development of chicks and improves their chances of survival.

For the implementation of the automated system, functional, structural and electrical schematic diagrams were developed. The functional diagram defines the main functions of the system and the relationships between its constituent parts. A flowchart shows the organization and hierarchy of system components. An electrical schematic diagram describes electrical connections between system elements.

As part of the development of the system, a modern element base was selected, which includes microcontrollers, sensors, relays and other components. The selection of these components was made on the basis of their compatibility, reliability and ability to ensure high accuracy of temperature control. In addition, a microcontroller operation algorithm was developed, which provides effective control of the incubator system.

The results of research and development of the automated incubator control system testify to its high efficiency and the possibility of application in real conditions. Accurate temperature control during the incubation process improves the quality of chick rearing, as well as reducing the risk of crop loss.

However, it is important to note that the developed system must be tested in practice to confirm its effectiveness and reliability. Also, it is possible that some shortcomings or limitations will be discovered, which will require further improvement and optimization of the system.

In general, the development of an automated incubator control system is an important step in improving the chick incubation process. It allows for more accurate control of temperature regimes and increases the efficiency of bird breeding.