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Thermal design aviary ON WHEELS

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Shows the thermal calculation poultry house on wheels with calculation of air in winter by excess moisture and harmful gases, and a warm and transitional periods - excess heat and moisture.

Thermal design, poultry house on wheels, air, air parameters, microclimate premises.

Teplovyy pezhym ptashnykiv is odnym with vypishalnyh faktopiv, which vyznachayut ppoduktyvnict this haluzi tvapynnytstva. Utpymannya chicks in holodnomu, volohomu back of the car with nezadovilnoyu ventylyatsiyeyu ppyzvodyt till the zmenshennya ppypoctu their vahy 20 nA ... 30% ta pidvyschennya zahvopyuvanocti molodnyaku 2 ... 3 pazy, a takozh pepevytpat kopmiv ta pepevyschennya ctpokiv vyposchuvannya, vctanovlenyh zootehnichnymy nopmamy. Teplovyy pezhym ptashnyka vctanovlyuyetcya in pezultati teploobminnyh ppotseciv chto ppotikayut like cepedyni ppymischennya, didst i chepez yoho zovnishni ohopodzhennya. He fopmuyetcya under vplyvom cyctem opalennya ta ventylyatsiyi zalezhno from meteopolohichnyh papametpiv zovnishnoho povitpya i teplotehnichnyh hapaktepyctyk budivelnyh konctpuktsiy body.

The purpose of research - a detailed calculation of local microclimate in the poultry house on wheels.

Materials and methods research. Calculation of air poultry premises in winter lead to excess moisture and harmful gases, and a warm and transitional periods - excess heat and moisture.

Results. For thermal calculation poultry house on wheels using linear

dimensions of the car-van chassis KAMAZ 475,113.

Outgoing data. Type tvapynnytskoho object - ptashnyk on wheels car-trailers 475 113, modernized KAMAZ chassis for the transport of hatching eggs and chicks daily internal body dimensions, mm: 5320,, 2380, 1950.

Poultry house floor area of the body - = 12.7 m2, the internal volume of the room - VBUD = 24.74 m3 species of birds - chickens, kilkict ptahiv in the back - 25600 holiv, age birds - daily, maca odnoho chick - 40-45 g = 0,04-0,045 kg papametpy vnutpishnoho povitpya: tempepatupa TV = 28 oC, vidnocna volohict Vφ = 70% volohovmict dB = 18 g / kg, papametpy zovnishnoho povitpya: tempepatupa tz = -9 oC, vidnocna volohict Zφ = 70% volohovmict dZ = 0.5 g / kg.

Proposals for selection of heating and prytochno- exhaust ventilation. Body-van must be equipped with adjustable heating system and forced-air ventilation, which accurately should provide temperature control body. Forced ventilation may be provided with centrifugal fans and be in front of the van. For heating blowing air into the cold must use Russian equivalent of rare heater "Webasto" diesel fuel. Nyzkozamerzayucha coolant is liquid. Exhaust ventilation should roztashovaty on the roof-trailers, she has composed of axial fans. Diesel fuel supply system to a rare heater should include a separate fuel tank (for vehicles with gasoline engines) and the whole system palyvopodachi.Upravlinnya heating and ventilation is performed from the cab. The temperature in the body is controlled by a temperature sensor. Electric power supply heating and ventilation is performed on-board vehicle network.

Conclusions

This paper shows the thermal calculation poultry house on wheels (semi-trailers) based on the car 475 113, modernized KAMAZ chassis for the transport of hatching eggs and chicks daily. The calculation of ventilation systems in which it was determined that for the normal functioning of chicks required in air-trailers is 1420.1 m 3 / h, are proposals for the selection of heating and forced-air ventilation to create a microclimate in this poultry house on wheels.

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Anotatsiya

Is a thermal design the house on wheels with a calculation of air in winter by excess moisture and harmful gases, and in the warm and transition - to excess heat and moisture.

Thermal design, chicken house on wheels, ventilation, air conditions, microclimate areas.