Effect Of Teratogenic Insecticide Carbofuran At Chicken Embryo

Abstrak :

This research aim to to know to span the dose carbofuran which have potency to teratogenic if exposure in yolk of chicken of race and forms abnormality generated by effect of exposure carbofuran of chicken embryo growth. Expected from this research serve the purpose of reference dose when found by residual carbofuran in egg yolk. Result of this research is obtained by is condition of environment so that need the environmental friendlier usage insecticide effort especially to life predator of non target carbofuran. Research represent the research exploration to get the dose carbofuran in egg yolk of race chicken able to result the abnormality of embryo growth so that data presented have the character of descriptive. In determination of dose teratogenic at this race chicken, is conducted by approach at LD50 of chicken equal to 25 mg / BW and nature of metabolism and also Pharmacokinetic carbofuran at mains. Dose teratogenic given by pursuant to the fraction which do not kill the embryo of chicken and have potency to generate the effect teratogenic. Furadan 3G used in research contain the active materials of carbofuran equal to 3%. Fertile eggs (FE) to be given by the treatment desinfection beforehand use the alcohol 70% by spray. FE made by a hole is later, then conducted by a inoculation use the syringe dispossible of size measure 1 ml with the 0,1 ml volume of each/every item. The FE is later packed into by incubator with the temperature 38oC and 60-80% humidity. The egg of incubated of during more or less 21 day. Variable measured by percentage of embryo can live and death. Chicken embryo which live and die then perceived by the disparity forms in gross morphology. The data is presented descriptively. Result from this research show to span the dose 1/8 and 1/10 (Furadan 3G equal to 0,5299 and 0,4241 mg / item equal by carbofuran 0,0159 and 0,0127 mg / egg) what have potency to generate the disparity of growth of chicken embryo. Disparity forms generated by effect of exposure carbofuran is : ectopic yolk (100%), ectopic cephal (14,28%), asymetris cranial (42,86%), ophthalmic (28,57%) and cross beak (14,28%).

Keyword :

Daftar Pustaka :


Karnofsky D. A. The chick embryo in drug screening; survey of teratology effects observed in the 4-day chick embryo. In : Teratology Principles and Techniques University of Chicago Press 1964 Chicago