

Is there a Solution to a Possible Nuclear Crisis from Cockroaches' Reliance on Radiation?

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Cockroaches hide in their nests in daylight and artificial light. They can disappear very quickly, even in the sudden light at night. Their hiding places are deep inside the walls and are well protected with additional equipment. It is not possible to reach this place by application methods such as spraying, dusting or wiping. Moreover, the number and distribution of cockroaches, as well as the number of nests, are generally estimated to be very low. It has been determined that the fry belonging to the Near Eastern species hatch after an incubation period of two or three months, but the effect of the insecticide applied during this time has already passed. The eggs are contained in an egg pack in a very well-protected capsule against insecticides. The first reason that strong insecticides do not achieve the expected success is the misconception that insects will be destroyed when they hover over the drug at night. It has been overlooked that insects can protect themselves from insecticides applied to the floor. For this purpose, cockroaches use their sense organs with excellent chemical properties. More or less a portion of the cockroach community in this settlement saves their lives in this way. Some of the believers states "The characteristics of the rhythmicity in living things of the kind that have just been described led many investigators of the phenomenon described led many investigators of the phenomenon many years ago to the conclusion that living things possess within themselves clock mechanisms that would permit them when isolated from all environmental changes which are conceded to be able to influence them, to measure off accurately periods closely corresponding to the length of the solar day and other natural periods" [1]. American cockroaches are faster than

other species in terms of reproduction rate. This increases their cell regeneration and the exchange of genes deformed by radiation with new genes accelerates [2].

Bibliography

1. DRA Wharton and ML Wharton. "The Effect of Radiation on the Longevity of the Cockroach, *Periplaneta americana*, as Affected by Dose, Age, Sex and Food Intake". *Radiation Research* 11 (1959): 600-615.
2. DR Nelson. "Hydrocarbon Synthesis in the American Cockroach". *Nature* 221 (1969): 854-855.