Atrazine vs. the Motor, Sensory, and Learning Behaviors of Planaria

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The purpose of this project is to see if Atrazine passes its negative effect on the sensory, motor, and learning behaviors of planaria to the second generation planaria. The second generation planaria are planaria who have been indirectly exposed to the different concentrations of Atrazine. Planaria were exposed to two different concentrations of Atrazine for a week and then certain tests testing their sensory, motor, and learning behaviors have been affected. Next the planaria will be cut in half and will regenerate in spring water until they have fully grown back. After they have fully grown back the planaria will go through the same tests. The results showed that Atrazine had a very similar impact on the 2nd generation planaria's behaviors as it did to the 1st generation planaria. The second generation planria's ability to respond to light was much slower ,with an average of 4.46 seconds, when compared to controls with an average of 1.68 seconds, this goes the same for planaria's motor behavior(their turn around time and movement ability). The second generation planaria also has a similar amount of learning trials (they had an average of 28.5 trials) compared to the first generation planaria with an average of 30.45 trials. In conclusion the data supports the hypothesis that the effects of Atrazine on the sensory, motor, and learning behaviors planaria are passed to the next generation.

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