

Insecticide dilution and application

1. You are given an insecticide formulation containing 15% chlorpyrifos. You are supposed to treat an area of 50 m² using the 5-liter dilution that you have made earlier using 100 ml of the formulation. What is the concentration of your application?
2. You were told that the area was treated at the rate of 20 mg/m² using a sprayer that dispensed out 50 ml per minute. It generally takes 2 minutes to treat 10 m². The total time taken to treat the entire area was 10 minutes. If 100 ml of the insecticide formulation was used in the preparation of the 2-liter solution, what is the concentration of the insecticide formulation?
3. Your staff was asked to treat a 100 m² cafeteria using an insecticide formulation containing 10% deltamethrin at the rate of 200 mg/m². He took 100 ml of the formulation and added to the 4.9-liter water. He finished treating all the 5-liter of diluted solution in the cafeteria. Did your staff follow the instruction as you had told him to do? Why?